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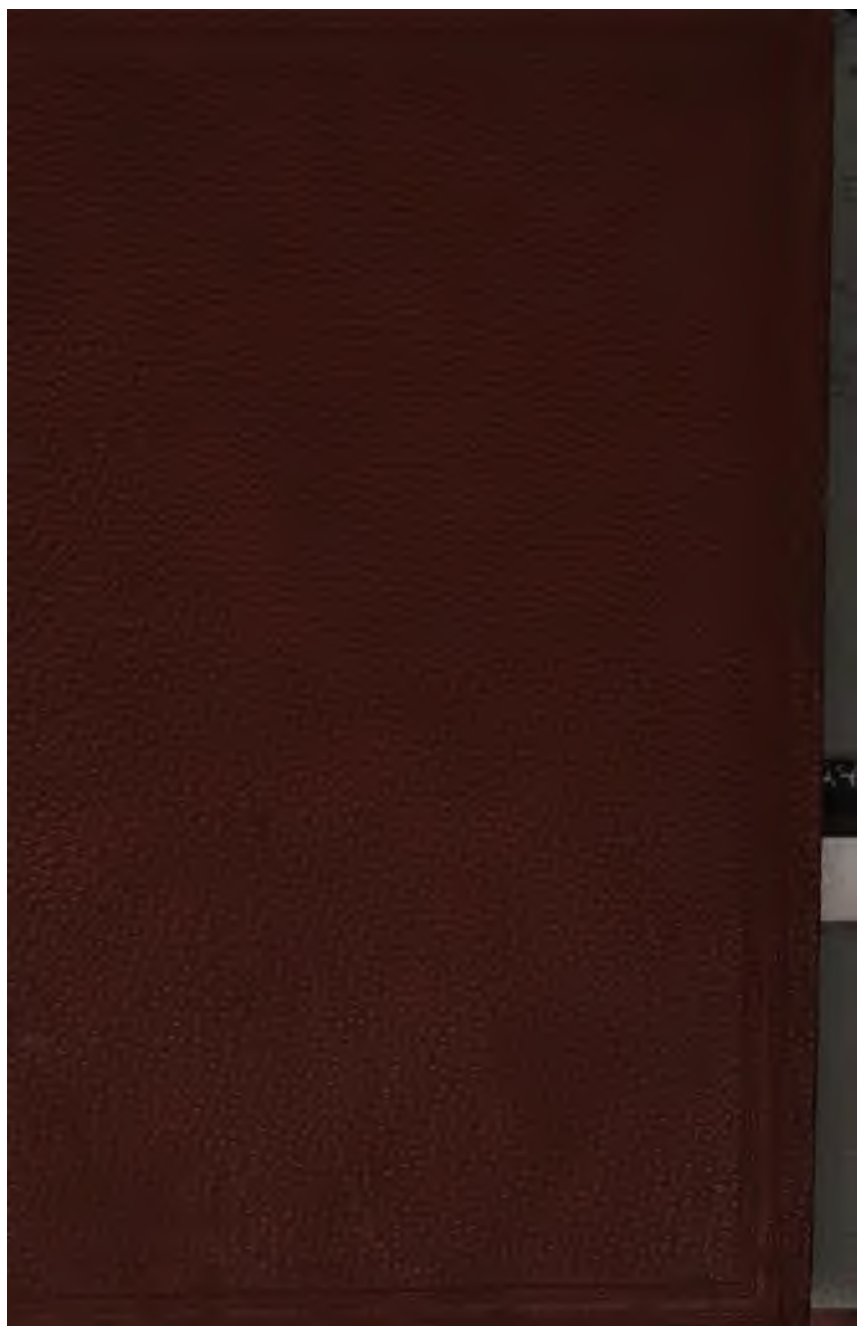
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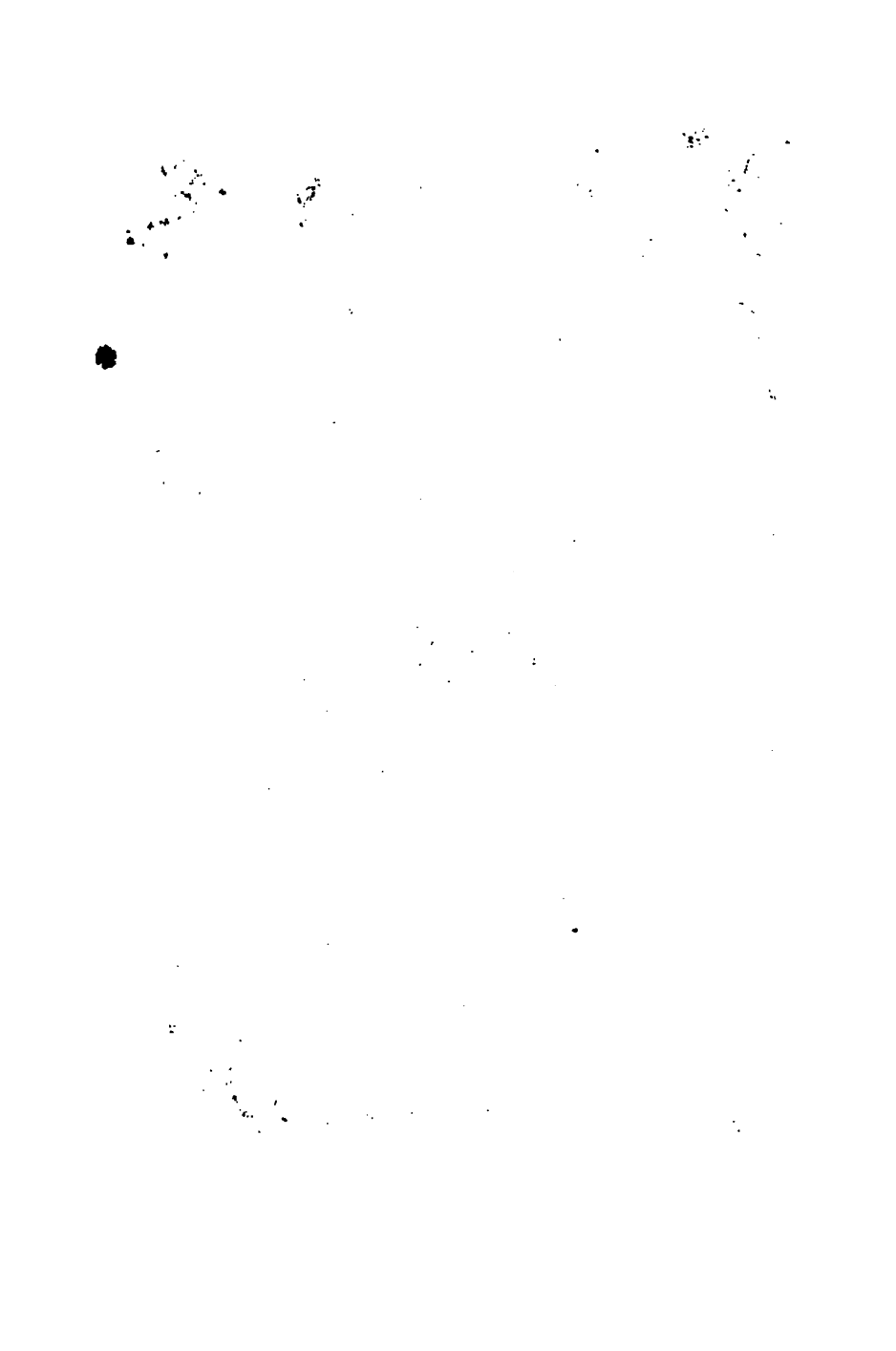
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A SYSTEM  
OF  
FIGURE-SKATING.



A SYSTEM  
OF  
FIGURE - SKATING.

BEING THE THEORY AND PRACTICE  
OF THE ART AS DEVELOPED IN ENGLAND, WITH A GLANCE  
AT ITS ORIGIN AND HISTORY.

BY  
H. E. VANDERVELL,  
AND  
T. MAXWELL WITHAM,  
*Members of the London Skating Club.*



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268. c. 73.

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## PREFACE.

I AM aware that the title of this work is somewhat ambitious, the difficulty of reducing the art of skating to a system being admitted by all who have given the matter any consideration.

Having been accustomed for very many years to invent, make notes, and draw diagrams of combinations of curves, which were the result of an eager search after novelties in this art, the memoranda began gradually to assume some interest, and perhaps importance, for in 1854 they included seven new varieties of the Q figures. Following upon these were the combinations that occur from joining the different kinds of single, double, and treble turns, with opposite curves. In 1860 I added to this record the Rocking Turn, designed for the purpose of completing an entire system of skating ; for this important link, uniting the outside forwards to the outside backwards, and the

inside forwards to the inside backwards, exhausts the combination of edges.

Up to the year 1868, the only work at all worthy of the art was one published in 1852 by Cyclos, and entitled "The Art of Skating," which, although it noticed the one Q figure then generally known, and the use of an opposing curve in the Shamrock, went no farther into intricate movements.

In 1866 one of my figures found its way into the *Field*, having been sent to that publication, as I afterwards learned, by my coadjutor, Mr. Witham, and is from that paper extracted and engraved in the new edition of the "Art of Skating," by Cyclos, published in 1868, page 59, diagram 5, fig. 1.

This excellent and honest writer there acknowledges "that to unite figures that were already double is more than doubly difficult, and I had never heard of it before;" and farther on, at page 65, remarks that "he is not acquainted with the performances of the London Skating Club." For this reason, probably, he attributes in the preface to his new work more importance to the Canadian Ice "Rink" for novelties in figure-skating than it deserves; for on behalf of English skaters who have ever held the first place in that highest branch of our art (for none will deny that from London have emanated the Club Figures), I feel

bound to say, that to no foreign source whatsoever (with one exception) are any of the contents of this work attributable, whether in the single or combined movements of easy or difficult skating. The exception alluded to will be found in the last chapter.

Although the only book worthy of the art is the one by Cyclos, much interesting correspondence relating to skating has occasionally been carried on in the pages of the *Field*; and in the number for Nov. 30, 1867, some of our Club Figures are given, and engraved, including some of my design, and in that and the succeeding numbers of that excellent publication the correspondence is continued, and my name prominently brought forward.

The principal writer there, M. A. C., who had ably described these figures, was, as I stated in a letter which I addressed to the editor, utterly unrecognised by me, and it was only after some five weeks had elapsed that I became aware, in consequence of a letter he sent me, that he was a member of the Skating Club, with whom I had been acquainted about a year. He informed me that he was writing a treatise on skating, and wished me to look over his list of figures, and add any I thought proper. In reply I said I

should be very pleased, as far as I could with due regard to my own MS., which I had been preparing for publication for some considerable time, and which was then nearly finished. This was his answer: "Dear Vandervell, I am horrified to find that you are writing a work on skating, as I feel that it is death to my little offspring. It would be ridiculous of me to think of publishing what I have written, knowing that you, who are so much more capable, are engaged on the same thing. . . . I will bring my MS. in the hope that it will be of some service to you," &c.

This he did, and I was rejoiced to find that upon all the essential points of skating our experience was identical, often couched in the same words; and that without destroying or altering the plan of my work, which, I am happy to say, had the approval of my friend, I have been enabled from a close study of his to extract from it, and incorporate in mine much valuable matter, and from his suggestions, additions, and corrections, upon the perusal of it, to still farther improve my MS.

I trust that this arrangement will be to the advantage of all who wish to skate; for certainly, notwithstanding the work of Cyclos, and the able

articles in the *Field*, with both of which every skater ought to be familiar, an entire system of skating has not been given to the public, and indeed never could be without the full recognition and development of the inside edge. I have therefore carried out my views in this work, well knowing that they will be antagonistic to those of many most excellent skaters, but I confidently anticipate that they will nevertheless be acquiesced in by a still larger proportion. The matter is simple: the old school of skaters would bury the inside in oblivion, and be content with a few picked movements. The modern school comprises those who, like ourselves and others, wish to see the inside brought into use for figuring, a host of pure one-footed and difficult feats of balancing added to the old glories of our art, and the system made complete.

On one point all must agree, that enough has not been done by the pen to further the attainment of the finest exercise that exists, to try to weed out the mystery and fable with which it has ever been surrounded, and finally to probe it to the bottom.

Until the subject shall have been taken up by others more competent to do it justice, the authors make their attempt to supply the well-known want.

The engravings of diagrams are from our own drawings, those of skates from photographs of the best kinds in use, whilst the attitudes are from photographs from life.

HENRY EUGENE VANDERVELL.

MR. VANDERVELL, in the foregoing preface, has described how it came to pass that we had agreed to assist each other in preparing the following pages for the press. I wish to add that all I know of the higher branch of figure-skating I owe almost entirely to him. Years before he knew me I had often watched his elaborate movements, and gone away with a feeling of depression, arising from the idea that, without the knowledge as to how he had arrived at such results, it was impossible to rival him. However, I worked away at these new difficulties in skating, most perseveringly, generally on a quiet pond by myself, and was eventually rewarded by gradually acquiring some of those feats in which a high degree of dexterity is indispensable. My manuscript, therefore, to a great extent consisted of the description of the figures developed by him, and the manner in which I had acquired the facility of doing them. Consequently, I trust there may be many who will be assisted by the practical directions given in this work.

In consequence of a severe accident that befell Mr. Vandervell within a few days of placing the MSS. in the hands of our publishers, the whole

labour of correcting and preparing the following pages for the press has devolved on me.

Our preparations having been so very far advanced (owing to our anxiety to place the work before the skating public this season) as to render any delay impossible, I had no choice in the matter, and was obliged to devote every moment I could possibly spare from graver pursuits to eliminating errors which became more apparent as sheet after sheet came from the printer's, and many of which arose from the difficulty of blending our respective MSS. into one work.

I trust, therefore, that our readers will take into consideration the short time I have had to complete my task, and whenever errors are apparent look on them with kind indulgence.

T. MAXWELL WITHAM.

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# A SYSTEM OF FIGURE-SKATING.

## CHAPTER I.

### A GLANCE AT THE ORIGIN AND HISTORY OF SKATING.

GEOLOGISTS tell us that the earth was formed under great heat, and that it is gradually cooling down,—a cheering prospect for future skaters certainly. Astronomers, on the other hand, we believe, incline to the opinion that it has approached a trifle nearer to the sun, and are anxiously awaiting the next transit of Venus to make themselves sure of the fact. Now if this should be the case, it is highly probable that the skater of the future, unless blessed with an artificially frozen surface or an artificial ice, will have to carry out his art on skates with wheels.

Notwithstanding the great heat which undoubtedly accompanied the creation, it is certain that the formation of ice is amongst the earliest phenomena of nature. In the Book of Job (the

oldest in the Bible) we find that when Elihu was reproving him and setting forth the wonderful power of God as displayed in His natural works, he used these words, "By the breath of God frost is given, and the breadth of the waters is straitened;" and that, when God himself takes up and continues that most beautiful exposition of His omnipotence, "the waters are hid as with a stone, and the face of the deep is frozen."

Thus we have Divine authority for the very early existence of ice. Now comes the question so difficult to answer: When was it first used for the purposes of the skater?

In our endeavours, as far as we can, to answer it, we shall first bring under the reader's notice the information respecting the origin of skating which we have received from Stockholm through the kindness of a friend, Mr. Kreuger, a native of Sweden. We subjoin a translation, merely premising that it fixes the introduction of the iron skate at two hundred years after the birth of Christ, and attributes the origin of it to the still more antique snow-shoe, and we entirely agree in this latter opinion, and had already written to the same effect.

*Remarks on the Origin of Skating.*

TRANSLATED FROM THE SWEDISH.

"When this exercise was originated is unknown, for, as far back as we have any account of it, it was


perfectly well known and practised in the whole North. Its origin, however, unquestionably belongs to the people of the North, that is, to the Scandinavians and Germans, amongst whom it is in most common use, because the Greeks and Romans knew nothing of this science, nor have they any special terms in their language to express skates or skating. The origin of skates in their present form of a wooden shoe with iron runners cannot be reckoned further back than the so-called Iron Age, or about two hundred years after the birth of Christ, because iron first came into general use then throughout the North.

“The art of sliding with snow-shoes or runners, from which skating is derived, is still older, and belongs to the inhabitants of the North. But these shoes were made only of wood, and resembled our present form of snow-shoes, which are used by the inhabitants of the most northerly parts of Sweden and Norway in the mountain tracks on their journeys across the immense snow-fields. These were also used originally by the Finnish people in the North, for which reason they were called from this time ‘Skrid finnai’ (sliding Finns), a common name for the most ancient inhabitants of Sweden both in the North Saga and by foreign authors. After iron became known and was worked in the North, iron runners were put under these snow-shoes; and in this way the present form of skates was developed, as well as

proficiency gained in skating on the ice,—a proficiency in which the Northern people early excelled, and which was reckoned as one of their chief accomplishments, and about which the Norsk Saga speaks with pride. But as amongst these Northern people also were Anglo-Saxons, who in the year 450 subdued the south part of Britain, together with Danes and Normans who—the former in 1015, and the latter in 1066—conquered the whole of England, probably the use of skates was introduced by these people into England together with other Northern customs.

“On these grounds the origin of the present form of skates and skating may be attributed to the Northern people about two hundred years after the birth of Christ.”

Another of our friends, well acquainted with many Anglo-Russian gentlemen of great ability, sends us their collective and unanimous opinions, which certainly seem to ignore Russia as having any concern in the origin of skating, for they all without exception concur in saying, “that skating not only is by no means a national amusement of Russians, but is of entirely foreign and quite recent introduction. Skates are quite unknown in the interior, and even a few miles from St. Petersburg. Mr. W—— remembers creating a great sensation in St. Petersburg by showing off a little practice some thirty years ago. No Russians



skate, except those who have resided at St. Petersburg. The way the ice forms, indeed, in the rapid-running rivers of Russia affords no facilities for the sport ; yet it is curious the art has not been cultivated in so cold a country, as there must be many ponds, lakes, &c. that would afford good skating. In St. Petersburg itself the only water that affords skating is an artificial pond kept up by the German and English residents."

From Amsterdam we have not been successful in adding anything to the above information. However, perhaps a closer search in Holland generally would be better rewarded. We regret that at present we are unable to make it, more especially as it is the native country, on the paternal side, of one of the writer's ancestors, all of whom, however, have long since passed away, and sources of information that otherwise might have been available are now dried up. In London, then, must we hunt up something more about this obscure matter.

To the courtesy of C. Knight Watson, Esq., Secretary of the London Society of Antiquaries, we are indebted for the following interesting particulars, which, if not settling the question, yet tend to throw a little more light upon this most puzzling subject, the origin of skating. The information is contained in a lecture delivered 18th February, 1841, by Charles Roach Smith, Esq. F.S.A., who exhibited to the Society an ancient

bone skate, accompanied by the following remarks in a letter to Sir H. Ellis:—

“In illustration of the antiquity and progressive improvement of one of our popular pastimes at this season of the year, I beg to submit to the inspection of the Society a skate of the kind in fashion among the citizens of London in the time of Henry the Second.

“It is formed of the bone of some animal made smooth on one side, with a hole at one extremity for a cord to fasten it to the shoe. At the other end a hole is also drilled horizontally to the depth of three inches, which might have received a plug, with another cord to secure it more effectually.

“It was found about two years since in Moorfields, near Finsbury Circus, in the boggy soil peculiar to that district. Its identity is, I conceive, fully established by the following passage in Fitz-Stephen, from his description of the sports of the citizens of London in his days: ‘When that great moor, which washeth Moorfields at the north wall of the city, is frozen over, great companies of young men go to sport upon the ice,’ &c. After describing their mode of sliding, he continues: ‘Some are better practised to the ice, and bind to their shoes bones, as the legs of some beasts (*tibias scilicet animalium*), and hold stakes in their hands, headed with sharp iron, which sometimes they strike against the ice: and these men go on with

speed, as doth a bird in the air, or darts shot from some warlike engine.'"

Strutt, in his "Sports and Pastimes," confesses his inability to trace the introduction of skating into this country; but of the correctness of his opinion, as to its originating in the necessities of more northern climates, there can be no question.

In Bishop Percy's translation of Runic poetry, skating is alluded to as being one of the accomplishments of the North of the highest character. Harold, in the poem called his "Complaint," says: "I know how to perform eight exercises—I fight with courage; I keep a firm seat on horseback; I am skilled in swimming; I glide along the ice on skates; I excel in darting the lance; I am dexterous at the oar; and yet a Russian maid disdains me."

And again, in the same collection, to show the exercises a Northern hero is proficient in: "I am master of nine accomplishments—I play well at chess; I know how to engrave Runic letters; I am apt at my book, and know how to handle the tools of the smith; I traverse the snow on skates of wood; I excel in shooting with the bow and in managing the oar; I sing to the harp and compose verses."

In the twenty-fourth table of the "Edda," skating is spoken of in words to the same effect: "Then the King asked what that young man could do who accompanied Thor. Thialfe an-

swered, that in running upon skates he would dispute the prize with any of the countries. The King owned that the talent he spoke of was a very fine one," &c. (Translation of M. Mallet's "Introduction à l'Histoire de Danemarc." 2 vols. London, 1770.)

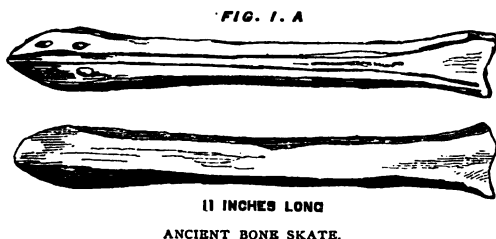
If there may arise any question among Runic scholars as to whether the passage above quoted, referring to traversing the snow on skates of wood, may not be more applicable to snow-shoes or to sledges, the description of the skate by Olaus Magnus\* agrees perfectly with that of Fitz-Stephen. He speaks of it as being "of polished iron, or of the shank-bone of a deer or sheep, about a foot long, filed down on one side, and greased with hog's-lard to repel the wet. . . .

"The lower end of the bone is cut rudely away at the sides, so as to resemble the prow of a boat, and an ingenious advantage appears to be taken of a smooth ridge of bone which naturally exists at the centre of the interior articular surface, for that being left it forms a finish to the whole, and

\* "Aliud vero genus quod ferro plano et polito, sive planis ossibus, cervinis, vel bovinis, scilicet tibias, naturalem lubricatam ob innatum pinguedinem habentibus, pedali longitudine sub plautis affixis, in sola glacie lubrica cursum, intendit velocissimum quemque in glaciali æqualitate semper currendo continuat. Cæteris bravium lucraturi currendo præveniunt qui cervinas tibias late limatis plautis affigunt porcina axungia perunctas, quia gelidis æquæ guttis velut per poras glaciei in vehementi frigore surgentibus tibiæ sic unctæ impediri aut constringi non possunt."—*Hist. Olai Magni de Gent, Septentrion Basileæ*, fol.

appears to answer the same purpose as the turned-up piece of steel in modern skates." . . .

In another work to which we referred, viz. "*Collectanea Antiqua*" (vol. i. page 167, date 1848), also by Mr. Roach Smith, F.S.A., there is a drawing of this said bone skate and some further interesting remarks. Here it is.



The above cut represents, in two views, a specimen of bone skates such as in former times were used by the citizens of London in one of their favourite winter pastimes.

"My friend, Herr Worsaae, of Copenhagen, informs me that skates of bone similar to those in my possession have been found in Holland, in Scandinavia, and particularly in the southern part of Sweden. He refers also to a very curious passage in one of the old Scandinavian mythological songs, in which it is said that Oller, or Uller, god of winter, runs on bones of animals over the ice.

"Formerly skates of bone were used in Iceland. Indeed, it appears evident they were in general use

in all parts of the north of Europe. I have been informed that they were not entirely superseded by the steel skates in London at the latter part of the last century."

In Fosbroke's "*Antiquities*" we found the following remarks under the head "Skating :"—"This was a great accomplishment of Thialfe in the 'Edda,' and was usual among the Northern and Celtick nations. Olaus Magnus describes the skait as of polished iron, or of the shank-bone of a deer or sheep, about a foot long. Great attention was paid to greasing them, 'because they should not be stopped by drops of water upon them.' Besides skaits, they had wooden shoes with iron points sharpened every way into teeth, triangular points of iron, &c.

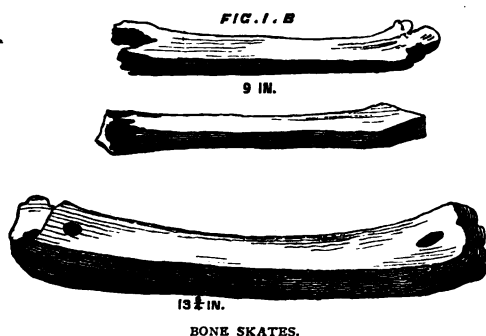
"Our ancestors were not only versed in sliding, but used the leg-bones of animals fastened to their shoes, and pushed themselves on with stakes headed with iron. The wooden skaits shod with iron are said to have been invented in the Low Countries, and certainly introduced here from Holland. We had also a seat of ice, as large as a millstone, and a person placed upon it was drawn along till it sometimes happened that, moving upon slippery places, they all fell headlong. The bone skaiters fought with poles."

In Nares' Glossary, under the head "Skating," we find it described as "an exercise undoubtedly introduced among us from Holland, but a kind of

rude essay towards it was made among ourselves very early by tying bones upon the feet. This we learn from Stowe, which he also had from Stephanio, or Fitz-Stephen."

He describes also contests on the ice between such skaters. Carr's remarks on Holland (1695), quoted by Todd, speak of the adroitness of the Dutch in annoying the French with the aid of their "scatzes," as he calls them, as long as the ice would bear them.

The following are drawings of bone skates found at Lincoln.



We must now observe that skates are so called from the action of the limb required in using them: from Anglo-Saxon *scitan*, to throw out; the Dutch *schatts*, French *eschasses*, Italian *scatta*, English *escatches* or *scatches*, *scate*, *skait*, *skate*. It is singular that Shakespeare never alludes to the art of skating.

The *Saturday Review* of January 14, 1865, has a very readable article upon skating. Many of the remarks bear so much upon its history, that we extract it nearly *in extenso*, being anxious to place before our readers in this compilation everything that can throw light upon the subject, merely remarking that all the best skaters will bear us out in asserting that Mr. Benjamin West, the President of the Academy, however accomplished as a skater, never could have performed such feats as cutting out on the ice in his skates the outlines of any desired statue, and that the "double 3 on the backward roll" which the writer supposes to be a Canadian figure was one of the earliest combinations practised by both the authors many years ago.

"There is surely no one point in which the national degeneracy, which began with the Reform Bill and culminated in railways, is now more glaringly manifest than in the weather. To say that English weather is not what English weather used to be, is but to say what would apply equally well to port-wine, parliamentary eloquence, and reverence for years and rank. But the falling-off in weather has been most complete. It may be the levelling tendency of the age, or it may be Admiral Fitzroy; but, if we are always to have frosts of the average length of two days each, one may as well emigrate at once to Labrador. The manlier virtues had better retire from business

entirely if, after much effort, the ice in the parks is to reach the final thickness of half an inch. Who is to teach the rising generation to hurl the adventurous snowball, and fabricate the illegal slide, if the snow is to fall thinly on Saturday morning, and turn into mud, at the latest, on Saturday afternoon? The citizens of London, says some old chronicler, used to hold fairs on the frozen Thames, and roast an ox whole on the ice. At present, for all that we can see, they will be just about as likely to set the Thames a-light altogether.

“Things have been getting worse and worse. In 1855 there was a fairly respectable skating season. In 1861 there was a last effort of ice to assert its existence as a creditable British institution. And now it has come to our having a balmy west wind in the beginning of January, after a couple of the most futile attempts on the part of the mercury that the oldest inhabitant is likely to remember, to reduce itself permanently below freezing-point. It must be in bitter mockery of the actual results that thermometers are graduated some twenty degrees below zero. Fahrenheit himself would blush with shame if he could have lived to feel such winters.

“In sober truth, it is rather hard upon the rising generation of English boys that they should have so little frosty weather. The art of skating, like that of swimming, is one which, when learnt

betimes, is never thoroughly forgotten. To be a good skater it is not necessary to have cleverness or nimbleness, or strength. It is far more important to have boldness, and most important of all to have plenty of practice. The repeated putting off and on of the skates, the patient plodding over a difficult figure, the readiness to learn by example—these are the means by which excellence is attained; and they are much more easy to the young than to the middle-aged. There are, indeed, some cardinal maxims in good skating which the most patient learner would take long in finding out for himself. It does not suggest itself to the untutored mind that half the work is practically done by the foot which is off the ice. Ease in crossing the legs, uprightness, and, still more, slowness of action, are things which are in reality indispensable to a first-rate performer, but may very well appear of little consequence to the beginner. The fact is, that skating is the one accomplishment which is preserved solely by tradition. There are no text-books about it, no laws, no recorded principle. Age and experience have the field entirely to themselves. Rising talent may display itself in any new form that it likes, but it seldom succeeds in establishing fertile innovations upon the practice of the elders. It may be questioned, indeed, whether the art is not one which has in historic times experienced some decline, if it be true, as is said, that Benjamin

West, the President of the Academy, was able to trace in his skates on the ice the outlines of any statue that might be named, an idea in the contemplation of which the modern mind can only take refuge in the confidence that it cannot be true. But however this may be, it must be readily conceded that the best skaters on the Long Water are not among the youngest men. The audacious pirouettes, the marvellous quadrilles, which so astonish and delight the annual crowds in Kensington Gardens, are executed most boldly and most successfully by men whose tiny silver skate has floated over the same waters for twenty seasons or more.

“An Edda of the tenth century, Strutt tells us, mentions that the god Uller was distinguished by his beauty, his arrows, and his skates. With so venerable a tradition to fall back upon, it seems a pity that the hardy Norseman has not contributed more to either the literature or the practice of skating. The practice, indeed, as has been observed, is totally independent of literature. It is most probable that the amusement is one which, in spite of Uller, was for a long time confined chiefly to the lower and middle classes, and never reached among them any very high pitch of art. It was looked upon much with the same view that the boys on the Serpentine even now seem to adopt, as an accomplishment, the acme of which was reached when the performer could succeed in

running along quickly on his skates, and finishing off with a long and triumphant slide on two feet in a straight line forward. A gentleman would probably then have no more thought of trying to execute different figures on the ice than he would at the present day of dancing in a drawing-room on the tips of his toes. It was about a century ago that the rude steps of the skaters were first moulded by cultivation, though who the instructor was who first taught the slippery foot to adapt itself to 'threes' and 'eights' history does not record.

"The first club established in these islands was that of Edinburgh, a city which still, we believe, maintains an excellent body of skaters. All at once the art rose to importance, and the figures were propagated in Germany, France, and Holland, and still more successfully, at a later period, in the United States and Canada. So necessary to civilization did this aristocratic amusement seem, that when trade was first opened with Brazil early in the present century, and fabulous fortunes were beginning to be realized by traffic with a country so rich and so ready to receive imports, among the first cargoes that were sent to Rio de Janeiro, a place where ice had never been seen in the memory of man, were thirty tons of warming-pans and thirty tons of skates! The greatest blow which has fallen upon English skating in modern times has been the draining of so much of the Fen country of

Cambridgeshire and Lincolnshire. For mile after mile, in days past, the water would be frozen on Whittlesea, unploughed by pestilent barges, and rarely deep enough to drown; and with the long 'runners' and a fair wind behind, seventy miles a day would not be thought so very great a score. Even now the fenmen keep up their winter races, and do the mile in little over the two minutes, the fastest pace in the world. On the Witham, some winters ago, the Lincolnshire volunteers trained themselves for the feat by which a Dutch army once repulsed a force of Frenchmen on the Scheldt, and, with rifle in hand, skated down the river to Boston in 'fours,' with the captain at their head, 'majestic and wonderful to behold!'

"It would be by no means amiss if some of our best skaters would draw up and print some authoritative collection of rules and precepts. Two things are wanted: one is a set of directions for those who are learning the art, some maxims approved by experience, and suggestions that have been found useful in practice. There is probably a philosophy of skating as well as of everything else, and, at all events, there are certain principles of true skating—such, for example, as that of the straight knee—which are very insufficiently recognised in England, and quite ignored abroad. The other desideratum is much more simple of execution. It is merely a description of the principal figures, with their proper names to each.

“The absence of some such authorized vocabulary as that which we have suggested leads in practice to a good deal of trouble. People who are in the habit of skating together may go through a ‘quadrille’ quietly and easily enough; but there is no common understanding among skaters as to the arrangement and system—nor, indeed, in many cases as to the very nature—of the different figures that compose it; and, in general, a fugleman is necessary to give the word of command.

“One consequence of the traditional element in all skating practice is the divergence of national tastes. The English and the Continental fashions, at any rate, are so different, that a Dutch or German skater may be recognised at a distance on the ice. The tendency to attitudinise is carried much further abroad than it is with us. To poise the body is, of course, in each case, the chief difficulty of the performance, but the Englishman prefers to surmount it, if possible, without showing the trouble it costs. The folded arms and forward slope of the body are abominations in the eyes of the demigods of the Long Water. Into the rival merits of the various schools it is, of course, impossible to enter without prejudice, and opinions may vary indefinitely upon the point of superior gracefulness. But as regards actual ability to perform the more difficult evolutions, we are persuaded that Englishmen will be found to carry away the palm. They practise more assiduously when they

get a chance, and they care more about the principle of succeeding. Canada is probably the only country which has skating clubs that could rival our own, and in the covered skating booths of Kingston and Montreal feats will be at times performed which would surprise even the park-keepers of Kensington. Boston too, and the New York Central Park, with Albany and Rochester and Burlington, have their marvels of elegance to show. But the fact probably is that, when once a certain degree of excellence has been reached, hardly anything that can be done by any one skater is too hard for another to accomplish. If one person were to begin to go through the figures with his eyes shut, a dozen others would have learnt to do the same in a week. In the course of last winter, an officer who had resided for some time in Canada was dining at an English mess, and incidentally mentioned, while speaking of the Canadian skating, a certain movement which he had seen repeatedly performed at the garrison town from which he came. It would be described in technical language as a 'double 3 on the backward roll.' Think only of the combined difficulties of the process. The backward roll itself is sometimes considered formidable ; it is popularly supposed, in fact, to be the necessary qualification for admission to the ranks of the Skating Club ; and the ordinary half-double is not so easy a matter when it comes to the left foot or the inside edge. But to combine

the two in one movement, and then to leave off with sufficient impetus to start at once on the other foot again: it seems hard enough in all conscience. The story, however, came to the ears of a gallant member of the Club, whose soul was superior to difficulties. He practised it resolutely for two days: at the end of the first he could manage it a little; at the end of the second he had fairly mastered the problem. Let us venture to recommend the task to any other gentleman who may be in want of something fresh to learn, in case, to the delight of skaters and the confusion of all hunting-men, the frost should come at last."

The difference in the style of American and Canadian skating as compared with that of England is most marked. It may be that the ice-rinks in that country are too crowded or too contracted to do our large and graceful curves, or it may be that they do not perceive that the smallness of their figures renders all their movements ungraceful from the necessity of such frequent and too obvious exertion in the doing of them; so that, whilst we give our just tribute of admiration to their dexterity in the art, we cannot, entertaining the views we do, arrive at any other conclusion than that such a style is *radically wrong*: for whatever may be the skill displayed in their two-footed figures, that is to say, two feet on the ice during the whole movement, there is greater skill to be displayed on one foot; and as to the superior charm and *abandon* of

a skater posed as in the latter position, we fancy that there can arise no question.

We think, therefore, that the skaters of England owe a great deal to the London Skating Club, and here we allude to its founders and our senior members, who have ever most wisely set their faces against the introduction into combined skating of any tricks or two-footed figures, and in that rank we shall ever be found. They have by that means, coupled with their illustrations of it which are so well known, preserved, elevated, and refined the style to a pitch of purity and excellence which, we fearlessly say, is unequalled in any country. Any innovations in combined skating that are to be found in this work are not, in our humble opinions, in the slightest degree antagonistic to the preservation and extension of this high standard, as they consist of delicate and difficult balancing on one foot carried out in movements of comparatively long duration, and pending certain changes of edge; and therefore, we venture to say, from their own intrinsic merits, they will rank as a legitimate extension and a high development of the art of combined skating, rising more and more into favour with all skaters, the better and more gracefully they may be able to illustrate them.

Taking a comprehensive view, then, of all the different information we have gathered together, and reviewing the same, we may fairly arrive at

the following conclusions without drawing too largely upon the imagination of our readers, viz. :— That the ancient snow-shoe is the parent of the skate; that the bone skate belonged exclusively to the remote period when skating was a pastime only. Then followed the introduction of iron, from the necessity of making it a more enduring and serviceable article for the purpose of travelling over the ice in long journeys, either for the requirements of the chase or trade, so that it merged at once into being a most useful implement of locomotion as well as a source of improved and extended recreation.

From the skate we pass on to consider the art of skating. It is evident that in its simple form it has been attained and has existed during a very long period, certainly two thousand years, and how much more we know not—not making much progress, though, as an accomplishment until the introduction of the iron, the successful application of which, as we have said, not only as a means of travelling, but also as a pastime in countries such as Holland and elsewhere, has by spreading to England given birth to the still better constructed and more highly finished skate with which Englishmen have quite recently, say in this nineteenth century, developed the beautiful art of figure-skating in combination.

We know not, alas! whether Thialfe used the bone or iron skate, and perhaps we may be per-

mitted to doubt whether he was great at "the double 3" or "outside back" with such an implement, but he certainly seems to have been the skater *par excellence* of those days.

Who was the ingenious inventor of the primitive or bone skate, and at what period did he live?

Whose was the fertile brain from which emanated the happy suggestion of the substitute of a wooden skate shod with iron?

Who was the daring individual who, knowing a little more of the laws of gravity and centrifugal force than his *confrères*, boldly trusted himself on the outside edge?

Who first skated backwards?

Who designed the figure 3, that aim of the young skater?

To whom are we indebted for the double and the cross rolls? And for combined skating? And Echo says, To whom? and History replies not, and therefore we cannot honour the worthy inventors from whom we, in common with all skaters, have derived a healthy exercise, and a scientific and fascinating amusement capable of almost indefinite expansion as to difficulties to be surmounted, more than by giving to their unknown names this passing tribute of our gratitude.

In our opinion the inventor of the figure 3 deserves our highest commendation as the great benefactor of figure-skating, because when that was known it was apparent that it was possible

to skate in combination with other skaters. And the same praise must be awarded to the inventor of the other standard figure, the 8. It is undoubtedly from these two figures being so accurately described on the ice that we get the terms "figure-skating," or "figuring," and further we may say that from the fact of the reverse 3, or a 3 with the left foot resembling the letter E, and the circle of inside or outside the letters O or C, and the serpentine line, the letter S, has arisen amongst our ancestors not very far removed, that, most ridiculous delusion (which we shall again have to allude to at the end of this work) that it was a customary habit of accomplished skaters in their day to cut out their names in a series of evolutions on skates: a myth which, so long sustained and transmitted through a generation or two, and still accepted by many ignorant of the footsteps of the skater with a simple faith, is certainly not the least curious part of the history of skating.

England, then, foremost as she has been in inventing and improving the arts and sciences, has not been behind in skating, and has, we rejoice to say, been the admitted birthplace and nursery of all that is fine in figure-skating, not only for single but for combined movements; and having now had an experience of thirty years, many of which have brought us in contact with the best skaters in this country, we can truthfully affirm, from very close observation, that the art has gone

on improving up to the present time, and at no former period did it ever reach its present development.

In England the winter of 1860-61 was the last one remarkable for great severity, a similar one not having occurred since that of 1854-55. Those fond of amusement on the ice (and who is not?) had ample reason to rejoice in five weeks' continuous skating. The well-known words, "'Ave a pair on, sir? Skates on, sir?" invited the promenaders in the London parks in every direction, and it was apparent that thousands of the humble classes were getting their daily bread in a most inclement season by ministering to the wants of the skater.

Judging, too, from the eagerness with which the invitation was accepted in those localities, and the pastime generally carried out all over the country, from our Royal Family down even to the little Arab of the London streets with his one skate tied on with string, it was evident that the popularity of skating, always considerable, was vastly on the increase. And no wonder that this should be so, seeing that, as an exercise, it is perhaps without an exception the most healthful and invigorating, warming the benumbed frame even to the extent of producing intense perspiration in the coldest day: this is occasioned in a remarkable manner too without that loss of breath which is, with this solitary exception, common to

all the violent exercises, such as running, rowing, boxing, &c., and also (unless the skater falls) without the distressing stiffness that is the concomitant of other athletic exercises. No marvel then that thousands upon thousands may be seen betaking themselves to the frozen surface of our ornamental waters with an ardour which assuredly exceeds that occasioned by the pursuit of any other pastime. Moreover, its popularity is increased by the amusement it affords to the non-skaters, who, as lookers-on, heartily enjoy the scene.

In the London parks, for instance (as we might expect from a population of three millions), the truly immense concourse watching for hours the "graceful evolutions," the hair-breadth 'scapes from collisions, the tumble actual and imminent, and the animated and picturesque scene in general, form a sight that certainly cannot be equalled elsewhere, nor described by word-painting.

Now the number of really accomplished figure-skaters compared with the many practising the art, although considerably more than it used to be in this country, and beyond that of any other, is nevertheless, we must admit, excessively small to what it ought to be, the fact being that the mass is made up of young and old *learners*, who having, with all respect to them, but hazy ideas how to acquire this art properly, arrive only at a certain low degree of skill, and never seem to progress as they ought to do.

The truth is that the deep mysteries of our art are known only to the select few. If any doubt should occur to the reader, let him turn over the daily papers in this memorable winter and read the doings on the ice. He will find that the ladies amused themselves by cutting out figures; that the Skating Club performed the "pedlar's acre" figure; that "serpents and birds of every description" were cut out most finely, especially by the ladies; that polkas, quadrilles, waltzes, &c. were executed, &c., and that a little girl of ten or eleven cut out her name! Certainly the trail of a serpent may be imitated by the serpentine line, but the idea of applying the polka or "pedlar's acre" (whatever that may mean) to the art of skating is certainly as much a flight of fancy as the "birds of every description," &c.

We must confess that, when we read such things as these in 1861, we were utterly surprised at first that such ignorance of what our art consists of should be displayed by the writers, but on reflecting that it has ever been surrounded, as we have said before, by mystery and fable, we ceased to wonder.

What the footprints of the skater are as developed in lines and figures from the lowest to the highest stage of difficulties will be gradually made apparent, we trust, to the reader who studies this work; but it certainly does seem curious that errors of this description should not only be

handed down to us as matters of truth from a bygone age, and apparently with not a spark of authority. That they should be added to by fanciful creations from the brains of writers in the year of progress 1861 is certainly not what we ought to expect.

The London Skating Club was founded in the year 1830, and consists of about a hundred and thirty members only. Among them are several of the nobility, clergy, and professional men and gentry; and inasmuch as the country generally furnishes as many members as London, the title of the "Skating Club of England" would perhaps be more appropriate. It is a select and perhaps rather an exclusive club, the Prince of Wales, her Royal Highness the Princess of Wales, and the Duke of Cambridge being its patrons. It is managed by a president, vice-president, committee, and Honorary secretary, and is governed by a code of rules. Permission, is granted to the Club by the Ranger of the Woods and Forests to erect their marquee on the banks of that part of the Serpentine called the Long Water. In anything like a skating winter, however, the space in front of the tent is so thronged by the general skating public that all attempts to carry out those beautiful figures which give such delight to the on-lookers are frustrated, and many of the strongest members of the Club, well-bruised all over, depart in disgust to other parts of the Serpentine, or more frequently to the

outskirts and environs of the metropolis, as Battersea Park, Crystal Palace, Wimbledon Park, and above all Richmond Park. Thus it frequently happens that many hundreds of the on-lookers at these times are under the impression that the evolutions they are watching are those of members of the Skating Club, whereas they are but the isolated movements of skaters for the most part vastly inferior in ability to them; for although there are certainly some very excellent skaters among the general public non-members, yet it is undeniable that in the ranks of the Skating Club will be found the most accomplished skaters in this country. The badge of the members is a miniature silver skate worn with a ribbon attached to the button-hole.

It seems a pity that an old-established club like the Skating Club, consisting of many influential gentlemen, should from the want of a little management be without a piece of ice where they can carry out the science of the art uninjured and uninterrupted.\* What a contrast to cricket clubs, which often have their own private ground carefully kept and tended! Yes, it certainly seems strange that this should be the case. Why is it? There are funds more ample than belong to many suburban cricket clubs. Now the cost of puddling

\* Since the above was written, an effort has been made to obtain a piece of ground on which to form a pond, and we trust it will be crowned with success.

a pond of an acre in area would hardly be more than the making of a cricket or croquet ground. It is true that the Club has permission to erect a tent in the parks, but there is no right admitted by the public for the Club to occupy exclusively any portion of the water. What is the consequence? Why, we repeat that the figures are interrupted by skaters rushing madly into the Club ring, and the ring itself so contracted by the spectators that it is almost impossible to skate.

Why does not the Club, then, provide itself with a pond some few inches deep, with water laid on from the main? We know that shallow water will bear much sooner than deep. We are afraid we are not altogether free from vanity in this matter, many of us preferring to perform with crowds to admire, even though our admirers are sadly in our way, to going and "wasting our sweetness," &c.

If there were set aside some portions of either of the parks for the use of the Club in the way that a portion of the Bois de Boulogne at Paris is set aside for the Paris club, we feel sure that the Club would willingly make a pond; and could not this pond, which need be but a few inches deep, serve during the summer months as a croquet-ground for the general public? Croquet is now a very popular game, and we feel sure that a pond might be constructed so as to serve the skater in winter, and the croquet-player in summer.

The Skating Club has been more than once

honoured by an invitation for a limited number of its members to skate in the presence of the Royal Family. On the first occasion the invitation was to the water in the rear of Buckingham Palace. A thaw suddenly set in, which sadly disappointed the members, no skating being possible. On the next occasion the invitation was to Virginia Water, and seventeen of the members of the Club, including one of the writers, went there. This was during the life of the late lamented Prince Consort. A sudden thaw again set in, and the Royal Family consequently did not attend, but sent General Seymour to receive the members. It is pleasant to record his courtesy on the occasion. A little skating was carried out, but the thaw was fatal to the complete enjoyment of the expedition.

It would be well were other clubs founded throughout the country for the practice of this beautiful art. As a hint in the formation of such we would suggest that a certain standard of excellence be agreed upon as a *sine quâ non* to those who apply for admission, in addition to the ballot-box, and that little badges of merit in accordance with the different degrees of excellence attained be granted. This would create just emulation, and, if the sub-committee of examiners were carefully chosen, would tend to elevate the art.

In the London Skating Club there has never been any direct examination of candidates for admission, although it has generally been supposed

that none would be admitted but those who were to a certain degree proficient. The fact is that in the Club there is an honourable and gentlemanly feeling amongst its members not to propose any new members unless they bid fair to sustain the reputation for good skating it has deservedly acquired.

If the Skating Club succeed in getting a piece of water exclusively for their own use, as we trust they will (strenuous efforts being now made by some of the members), this season, their rule might and probably would be relaxed to any gentleman properly nominated, elected a member, whether he could skate or not, as most of the members of the Club feel that, as a Club for the preservation and elevation of the art of figure-skating, it should endeavour to teach the "tricks of the trade" to those who are willing to learn.

Altogether it is a very peculiar Club, in which there is much to admire, but it does not follow, however, that it should be wholly taken for a model for others when circumstances are different. But from the desire of all good skaters to join its ranks, it being the only club of the sort in England, it certainly very fairly represents the greatest excellence that difficult skating has attained to in this country at the present time.

An engraving in the *Illustrated London News* of Feb. 2, 1867, represents a skating match in the Cambridgeshire Fens, and goes on to say, "During

the late frost the skaters of Cambridgeshire, Huntingdonshire, and other counties, where extensive tracts of fen country were covered with ice, met at several places for public competition in that exercise, the prize being usually a sweepstakes. The Huntingdonshire racecourse on three successive days was thronged by several thousand spectators of these skating-matches, the ground being overflowed and the water frozen hard to the length of nearly a mile. There was a similar gathering at Welney, on the Great Cambridgeshire Wash, which extends twenty miles across the county, between the Old and New Bedford rivers, and is about a mile wide. At Littleport also, four miles north of the town of Ely, the match on Monday week for the skating championship was very numerously attended. The skating here took place on the river, which is wide and deep at Littleport, but there were no accidents, though several thousands of persons ventured upon the ice. A course of one mile had been measured out, and the skaters had to traverse it twice, contending with each other in successive pairs. The champion stakes were won by Mr. Thomas Porter, of Southery; the time he occupied in skating the distance being seven minutes, four and a half seconds."

In the same number of this excellent journal we have described, too, how they manage skating in Paris, in the Bois de Boulogne, under Imperial patronage, with a very good engraving illustrating

the scene. We append the description which is annexed to the engraving.

*“ Skating in the Bois de Boulogne.*

“ The Parisians and visitors to Paris during the late frost were enabled to enjoy the amusement of skating on the ornamental waters of the Bois de Boulogne without incurring the danger of any such dreadful accident as that which has cost us forty English lives in our lake of death in Regent’s Park. It was once remarked that ‘they manage these things better in France.’ We give an illustration of the brilliant scene at night, when a large portion of the ice was illuminated by small lanterns hung in festoons from the posts around its margin, with the addition of standard camp-torches and Bengal lights. Another illustration shows the Emperor and Empress, with their party, on the ice of the Lac de Madrid ; his Majesty, who is an accomplished performer of this graceful exercise, skating with other gentlemen in the middle, whilst the Empress is seated in one of the swan-shaped sledges, pushed swiftly along by an attendant skater behind, which are the resource of ladies disinclined to trust their own feet on such a slippery path. Near her Majesty is the young Prince Imperial, about to take a lesson in the art of skating. The general company, after a loyal recognition of their Majesties’ presence, continued to divert themselves as before.”

A brother of one of the writers was at Vienna some three winters back, and, having his skates with him, performed for the honour of Old England in his best style. The people were amazed, and clapped their hands in appreciation of his double threes, &c. There was not a man out of the many skating there that had ever seen anything of the sort before, but they one and all set to work to emulate him, and the Hungarians (who are celebrated for their small feet and high insteps, great advantages to the skater) persevered with wonderful courage, despite of tumbles and failures, and made great progress. The frost unfortunately broke up. It would be curious to see if the germs of figure-skating instilled into apt pupils have borne fruit.\*

\* Should there be any readers of this work in possession of any authentic information that would tend to throw farther light upon the origin and extend the history of skating, and would like, in the interests of the art, to entrust it to the authors with a view to its insertion, should this work ever reach a second edition, they will be happy to receive it.

## CHAPTER II.

### THE THEORY OF SKATING.

SKATING, introduced undoubtedly as a pastime, then cultivated as a means of travelling over ice for the purposes of chase or trade, has again expanded once more into a charming recreation, which has gone on progressively improving to the very time we are now writing.

Philosophers years ago, when skating was in a much less advanced state, have thought it worthy of notice, from the very beautiful manner in which the curves used in figure-skating illustrate the two great forces, centripetal and centrifugal. Dr. Arnott, in his "Elements of Physics," thus most justly speaks of it : "Skating becomes to the intelligent man an intellectual as well as a sensitive or bodily treat, from its exemplifying so pleasingly the laws of motion."

Happily, at the present day, owing to the advantages of education, almost every skater, however humble his rank, has or ought to have a knowledge more or less extensive of these laws; but, nevertheless, this book might fall into the

hands of some who have it not, and yet wish to become first-rate skaters. Therefore we cannot refrain from saying to such that, to thoroughly comprehend and enjoy the many scientific beauties of our art, it is necessary to know a little at any rate of the nature of these grand laws, which so occupied the giant mind and immortalized the name of our great Newton.

Pervading, as he has shown us, the universe, and apparent as are their effects in all our daily movements *per mare*, *per terram*, these forces, it must be remembered, are in the art of skating brought into play on ice, a novel material for our progression. We shall glide smoothly over its surface, and with our body inclined at ever-varying angles, and in a manner so very different from our ordinary habits on *terra firma*, that we cannot imagine a few winter evenings better spent than in reading up a little of the subject, which may be found most pleasantly described in the work we have mentioned, and in many others under separate heads, or collectively under "Dynamics."

Of course some few readers will say that such knowledge as applied to skating is superfluous and unnecessary, and will remind us of the fact that it has been and can be learned without ; but how few there are but would have been assisted by a competent knowledge we shall endeavour to show in the course of this work.

Notwithstanding the inevitable counterblast, then,

we shall give a few extracts from Dr. Arnott's very readable work on Physics, because in it he frequently alludes to our art. We would also refer the reader to an admirable comprehensive work on Natural Philosophy, by a senior and energetic member of our club, Mr. Brooke, a gentleman who is as fond of the difficulties of skating as of science.

#### " MOTION

Is the term applied to the changing of place among bodies.

"Were there no motion in the universe, it would be dead—it would be without the rising or setting sun or river flow, or sound or light or life.

"To understand the nature and laws of the motions or changes which are going on around him is to man of the greatest importance.

"That bodies tend to continue in the state of motion or rest in which they happen to be, so as to render force necessary to change the state, is seen in the following facts. The scientific term used to express the general truth is inertia. . . .

"A man standing carelessly at the stern of a boat falls into the water behind when the boat begins to move, because his feet are pulled forward while the inertia of the body keeps it where it was, and therefore without its support. The stopping of a boat again illustrates the opposite inertia of motion by the man's falling forward.

“From the instances now given it is seen that a body at rest would never move if force were not applied, and that a body put into motion retains motion, at any rate for a time, after the force has ceased. Still there is a feeling from common experience that motion is an unnatural or forced state of bodies, and that all moving things, if left to themselves, would gradually come to rest. . . .

“On more attentive consideration, however, it may be perceived that there are great differences in the duration of motions, and that the differences are always exactly proportioned to evident causes of retardation, and chiefly to friction and the resistance of the air.

“But it is in the celestial spaces that we see motion completely freed from the obstacles of air and friction, and there they slacken not.

“Force is required to bend motion. A body moving in a circle, then, or curve, is constrained to do what is contrary to its inertia. A person, on first approaching this subject, might suppose that a body which for a time has been made to move in a circle should naturally continue to do so when set at liberty. But on reflecting that a circle may be considered as made up of an infinite number of little straight lines, and that the body moving in it has its motion bent at every step of the progress, the reason is seen why constant force becomes necessary to keep it there, and just equal to the inertia with which the body tends at every point

of the circle to pursue the straight line called a tangent. . . .

“The force required to keep the body in the bent course is called centripetal or centre-seeking force, while the inertia of the body tending outwards, that is, to move in a straight line, is called the centrifugal or centre-flying force.

“In skating with great velocity this leaning inwards at the turnings becomes very remarkable, and gives occasion to the fine variety of attitudes displayed by the expert; and if a skater in running finds his body incline to one side and is in danger of falling, he merely makes his skate describe a slight curve towards that side, and the centrifugal force of the body, refusing as it were to follow in the curve, restores the perpendicularity.

“The last example explains also why a hoop rolled along the ground goes so long without falling if it inclines to one side threatening to fall: by that very circumstance its course is bent to that side, and, like the skater who bends, it rises again; the bending of its course to either side thus brings its supporting base again under it.

“A coin dropped on the table or floor often exhibits the same phenomenon. The two great forces of nature are attraction and repulsion.”

Further, there is accelerated motion from gravity, and retarded motion from gravity. Then comes,—

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“CENTRE OF GRAVITY.

“Now in every body or mass, or system of connected masses, in the universe, there is a point about which all the parts balance or have equilibrium, and it is this point which is called the centre of gravity or of inertia.

“To say that the centre of gravity will always take the lowest situation which the support of the body will allow is only to repeat that bodies tend by their gravity towards the centre of the earth.”

Speaking of balancing, he says: “Much art of this sort is also shown by the attitudes and evolutions of the skater, &c. ; when a man walks or runs he inclines forwards that the centre of gravity may overhang the base, and he must then be constantly advancing his feet to prevent his falling. He makes his body incline just enough to produce the velocity which he desires.

“Grace of carriage includes not only a perfect freedom of motion, but also a firmness of step or constant steady bearing of the centre of gravity over the base.”

We have but space for an illustration of centrifugal and centripetal force which happened to one of the writers during a youthful ramble among the Cornish mines. There was at one of them a smooth conical hole in the ground, about fifteen feet deep by twelve feet wide, in fact in shape like a giant funnel, and tapering to a point at the bottom.

The friend, a miner, who accompanied him, asked him to get down and see if he could scramble out. The first part he found easy enough, but the latter was quite the contrary on account of the smooth sides, and after a few fruitless efforts he told him the way, viz. by running round, rising gradually, and increasing the velocity as the diameter increased. He was then quite successful, but did not think in those days of the beauty of the illustration of the working of these two great forces, which are so intimately united in the theory and practice of figure-skating, as carried out on a material of a wonderful nature, ice—on, and partly in, the surface of which our steel-mounted skate slides with an astonishingly small amount of friction, when we take into account the cutting nature of its action thereon. It is this remarkable peculiarity that constitutes the great charm of skating upon ice, so far different from anything that has ever been invented of an artificial nature, or by the substitute of a wooden floor and skates with wheels. And it is in this place that we must consider first how important it is in the construction of the skate-iron to see that it shall not be too much curved, for then the bearing upon the ice being short the cutting edge will penetrate too much, and the friction will be unnecessarily increased a great deal more than it would if the skate-iron had been kept flatter, for then the weight of the skater being distributed over a longer portion of the

skate-iron, actually bearing on the ice, it would not cut in so deeply, and the friction would be less, notwithstanding the slight increase of bearing-surface or edge.

What we want is a sufficient hold of the ice for safety, consistent with so much of a curve as will permit us to turn comfortably without scraping.

In a recent article on skating in the *Field*, by a clever writer (*Comes*), allusion is made to the curve of the skate-iron having an important bearing upon the circle or arc it would most readily describe, or, in other words, that each individual curve of a skate-iron has an individual circle or arc that it would naturally describe on the ice, in preference to any other that the skater may force it to do, and all departure from which individual curve is a loss of power. There is much doubtless in this, but we are not prepared without experiment to wholly endorse it.

The width of the iron, too, is closely connected with this part of the subject under discussion. Were ice harder, the figure-skater could probably have no greater luxury than skates almost approaching to a knife-edge; but at its usual density we must have it of such a width as will also act as a check to the penetration of the cutting edge beyond the necessary amount.

And what, *en passant*, have skate-makers done for us in solving these most important points? We are sorry to say, positively nothing.

The whole question of the friction and penetration of the cutting edge and the width of the iron ought to be made the subject of careful experiment, and we suppose it will devolve upon some of us to do it in the absence of any energy in the constructors. Our experience leans in the direction of a narrow iron decidedly flat.

Again, skate-irons are made much too soft. They ought to be as hard as possible, without being brittle, and even this brittleness may be in some measure counteracted by leaving the upper part of iron, while the under side is of the hardest steel.

Finally, skate-irons ought to be much more highly polished, the last gloss being completed lengthways of the iron, and not across, as now; this would take out the little waves which are left in, and which, trifling as they appear, are the stanch friends of friction, which we must do all we can to diminish. Why, we have seen in the history how the skaters of a remote age were wise enough to grease their skates for anti-friction purposes!

The skater on ice, then, if furnished with properly constructed skates, is certainly very highly favoured when contending with the great enemy of motion, viz. friction. But in his passage through the air it again more strongly opposes his progress. It will be found that we have endeavoured in our general directions, and elsewhere, to suggest a

means of counteracting this loss of motion, so very important do we consider it, by adopting an attitude somewhat sideways, something on the same principle, probably, as that which enables a swimmer to swim faster when in that position.

We all know how difficult it is to skate against the wind, and how in a gale our way is altogether stopped unless we tack, and our beautiful combined figures are distorted and rendered impracticable. And we all know, too, on the other hand, at what a fearful velocity we can go with the wind, so great, indeed, that we have to call in our enemy, friction, to restrain our impetus.

Motion is obtained on skates by pressing the forward portion of the edge of one skate at an angular position of about forty-five degrees into the ice, and taking up the impetus, and travelling on the edge of the other skate, describing a line more or less curved, the body being therefore inclined sideways as much as will balance the centrifugal force ; and this is, in fact, the theory of the balanced position, viz. an equilibrium between the attraction of gravity and centrifugal force, when those forces are called into play by our motion in a curved line, the inclination of the body being sideways from the perpendicular. The moment the balance is lost by too little inclination sideways, or, what amounts to the same thing, too much centrifugal force, the unskilful skater is thrown outwards, as it were, and probably feels the natural

effects of the force of gravity in what a worthy writer calls a "jolly good tumble." But the experienced skater would in such a case probably tilt over to the other side or angle of inclination, and catch the edge of the iron, and again restore the balance by an amended and appropriate curve, in far less time than it takes us to notice it. This changing of edge is the groundwork of some difficult figures, as will be shown.

A skater may thus be thrown, as it were, beyond the attraction of gravity, &c. as he had falsely arranged for a given inclination; but he may also lose the edge when within, as it were, the centre of gravity, by an accident, such as the slip of the iron; yet whilst the "jolly good tumble" would no doubt put in an appearance, the cause is slightly different, however much similarity there might be in effect.

Being under weigh, then, the power of balancing lies in adapting a proper curve to the inclination sideways, or *vice versa*, by gradually, imperceptibly, and continually altering and rectifying either, as they have a tendency to get wrong from the operation of friction, or any other disturbing cause.

If the velocity of the skater is very great, it is impossible to describe a small circle, say, for instance, six feet diameter. He would require to lean over so much that the skate-iron would slip. The large circle can, however, be adapted to any velocity that can be attained on skates.

We notice this to show that in the first instance our powers are restrained by what we are afraid we must call a practical defect ; in the second it is not so.

It is therefore plain that the attainment of a steady, and therefore a true balance, preserved as such through all the intricate evolutions it is possible to carry out on skates, can be nothing short of a great practical work, developed and assisted by instructions and directions framed in accordance with the theory. The reader, when he arrives farther on, will therefore easily comprehend the great value of the spiral figure and the serpentine line coupled with the semi-sideways position of the body as embodying such principles.

A surface of ice for all practical purposes may be called a level, plain, and flat surface, but we conjecture that, in theory, owing to the convexity of the earth, it must in reality partake of its nature, but of course such is imperceptible to our limited vision. Nevertheless, a skater in an inclined position describing his curves on such a surface, whether we can see him go hull down or not, is no mean study for the mathematician: he becomes an animated drawing instrument.

Let us now apply these principles to the consideration of the well-known inside and outside edges, and in imagination we will ask a young skater what his ideas are on the subject ; he will probably answer that the inside is very easy to

learn and very ugly, and the outside very difficult and very pretty ; and that Paterfamilias tells him not to care about the inside, but to learn the outside, and thus leaves on his mind the impression that the two are as far removed from each other in beauty and principle as light from dark. Whereas it is well known to the most accomplished skaters that to insert a large and true curve of inside forwards into any movement is one of our most supreme difficulties ; and as to the scientific part of the question, what is the real state of the case ? Let us read again the extract from Arnott about the hoop and coin,—say, for example, that its rim being flat, and therefore having two edges, very fairly represents the inside and outside edge ; and when itself set in motion in a curve, the position of the skater.

Whichever way it goes, backwards or forwards, say on the inside or outside edge, in large or in small curves, it always appears to be seeking a centre, and, on closer observation of its two edges, that it can therefore never travel on the outside, but always on that nearest to the centre, which must necessarily be the inside. What, then, are we to understand ; that the skater never travels on an outside edge ? Now, the fact is, that there is in theory no such thing as an inside or outside edge ; there is but one, and now we proceed to prove it. Let a skater place either foot in front, and in line with the other, say the left, in front of the right ;

and, going forwards with both feet thus, describe an arc whose centre shall be on his left. To his surprise, probably, he will find that he is doing the so-called outside and inside at the same time, the left being on the out-, and the right on the in-side edge.

The same thing happens also when the feet are placed side by side, but perhaps the most striking proof that it is possible to give to a sceptical mind is this. It is well known that skates are made about five-sixteenths of an inch wide at the bottom of the irons to prevent them cutting in too deep. But imagine a much harder ice, or a material of its nature on which it would be possible to use skates with only one edge, as a knife. It is apparent that the inside and outside would be blended into this one working edge,—the only one, in fact, that does exist in theory, and of which the said inside and outside are the representatives in practice. We are not quite sure that a very young skater of feather weight might not be able to give us a practical illustration of the truth of this on ordinary ice were it necessary, but it cannot be.

So then the words “inside” and “outside,” as applied to skating, are in one sense conventional terms, which really express the opposite inclinations of the skater sideways from the perpendicular position, either to the right or left, according to the foot used, such inclination being supported on the principles already alluded to.

No wonder that these words, "inside" and "outside," mislead and confuse, they are so ambiguous; for if the right side of the right skate-iron is the outside, and the left the inside, surely the right side of your boot ought to be the outside, and the left the inside, yet the real inside of your boot is certainly where you put your foot in. No man with corns will deny it.

The subject is deservedly brought to a crisis in the question contained in the following clever conundrum, which we cannot help quoting: "Which side of a horse has the most hair on?" The answer, "The outside."

It is a pity that there are no words which would better express the meaning. If we were to use military terms, and say "right foot forward," "right incline," "left foot forward," "left incline," &c., we might get at the sense better, but the length of the words would be a serious objection. We have therefore, with no little regret, been obliged to retain these ambiguous words, unsatisfactory as they are, adding to our explanation that they in another sense represent the two edges of the skate as adapted for its use on ice, and that there is but one edge in the principle of skating, and that of the two of the skate the one that is nearest to the centre of the circle or arc being described must, from the very nature of the position of the skater, be in reality always the inside, for a skater must lean in at the turning or curve, no matter what

name conventional use has given to the particular edge he is said to be upon.

It naturally follows that we are led to inquire here what it is that makes the so-called outside more beautiful, striking, and popular than the so-called inside?

Well, it is chiefly owing to the very bad way in which the inside is almost invariably done, and partly to the fact that the position of the skater—balanced on one foot, and leaning over in the direction under consideration, without a leg ready, as in the inside edge, to support the employed foot in case of a mistake—appears foreign and unusual as contrasted with our ordinary habits and requirements incidental to our actions on *terra firma*. Hence its singularity when illustrated in a gliding motion.

But the reader may say, "You have already proved that in principle the inside and outside are alike, and this does not account for the difference." It does not, indeed, in consequence of the violent contrast which at present exists between the two, to the injury and disgrace of the inside, and this owing to the attitude, which always gives the idea, from the leg unemployed being held out at the side, that the skater is supported or propped up, as it were, and therefore in no apparent danger of falling.

Now we propose a remedy for this which will bring the inside very much nearer in appearance

and beauty to the outside by giving it that semblance of danger from falling which is the charm of the outside, and which makes such a remarkable and vivid impression upon the minds of children, and even too on those of older growth. We well remember once hearing the remark of a little girl whilst clutching her mother's dress in that peculiar manner demonstrative of fear, as she watched a skater coming towards her on a smooth and steady curve of outside forwards, "Mamma! mamma! he'll fall! he'll fall!"

The remedy we propose, then, is to remove the unemployed leg. Start not, gentle reader! Not by a surgical operation, but merely by placing it out of the way in the rear, as we shall more fully detail in our general directions. This will make the inside unobjectionable for figure-skating, and, as a consequence, a large and novel field of practice comes into use, and the entire system of skating can be pursued to the very end.

The position of the circus equestrian in the slow and rapid acts of horsemanship, and the lifting of his feet, will afford matter for useful reflection on the subject of outside and inside.

Here are the views of another writer on skating, Cyclos: "The turns on the inside edge are comparatively easy, because the skater requires to lean very little off the centre of gravity,\* and it is

\* Because of the weight of the unemployed leg, which is pulling him over. On the *outside* edge a skater has to lean over more to

towards that side where he has the other foot ready to support him in case of need. Those on the outside edge are, on the other hand, very difficult to attain, because the learner must lean very considerably off the centre of gravity before he properly reaches the outside edge, and he leans to that side where he is deprived of the aid of the other foot. It would be quite impossible to stand in this position, but he can circle or curve, because the centrifugal force keeps him from falling."

In no spirit of criticism, we would merely remark that it is impossible to stand in either of the positions alluded to without motion.

It is quite the fact that a skater, or rather a learner, would more readily be placed from his natural position at rest, on to the inside edge, for this reason, that standing with both feet parallel on the ice, and keeping the body upright, it is impossible to retain the centre of gravity, when one foot is lifted, unless the body is shifted over to the contrary side ; in short, the mere lifting of one foot, from its weight, makes the learner incline to the inside when the body is kept upright and the balance arranged for both feet. But this reasoning does not stand good for a balance on one foot, and, therefore, on the flat of the iron, for then the inclination to catch either edge would be identical.

overcome the corresponding weight of the unemployed leg, which is on the other side of the balance.

We can hardly use either the expression "leaning off the centre of gravity," because no leaning over can be practical until centrifugal force comes into play, and then the ensuing balance upsets the expression.

Like all other writers, Cyclos advises the learner to avoid practising the inside edge forwards, as, he says, it is never used by good skaters, and he fears it rather impedes the acquirement of the outside, but backwards, he says, it is a different thing ; yet he insists upon the learner being able to do the reverse 3 figure, which begins upon the inside forwards ; and in the same manner he alludes to the Q figure, of which it forms a third.

Now here we have a proof of its value from one who would no doubt rather have nothing to say in its favour, but who, when he wishes to write about any extension of the art, finds it cannot be dispensed with. We trust that so excellent a writer will think better of the inside forwards in its new dress.

In the great modern skating winter of 1860-61, a letter appeared in the *Times*, the writer of which said in substance that the best and quickest way to learn skating was to walk forwards, alternately crossing the feet,—this is what is known as the "cross roll," or "cross outside,"—as by this means the outside edge would be acquired in a remarkably short time ; and of course it has become an established opinion amongst most skaters, especially

those of the old school, that when the outside is acquired, all the other movements are mere trifles!

Now the act of walking on the ice in this crossed position is extremely difficult for a beginner, and, when the difficulty is mastered, the outside edge will also no doubt be so. The great advantage in this method is that we get a "prop," but we get into a bad habit also, for the style of skating by this method can be nothing else than excessively small and cramped, because the stroke from the crossed edge is very feeble with the inexperienced skater, and the arcs or curves very small and contracted. We hesitate not to say that, if any skater thinks he will learn the art, as it should be learnt, by this method, our experience tells us he will be grievously disappointed. There is no royal road to the acquisition of it; plenty of practice, accompanied with the necessary nerve, intelligence, and perseverance, and carried out by directions framed from the principles which we have already described, will alone enable the learner to attain the summit of excellence in the shortest possible time, according to his natural abilities, whilst a foundation is laid upon which may be built anything novel and difficult.

Yet we will not go so far as to say this is the case with all. We admit that without any theoretical knowledge a very, very small proportion of skaters will take to and learn this art intuitively, but the immense number who never can do so unless

instructed is apparent ; for, as Cyclos has well observed, "To see really good skating is the best teaching ; but as a general rule that is only to be seen in the larger cities, where the greater field of emulation has produced it. Country skaters from never seeing it are not even aware of what can be done on skates." This is undoubtedly the case.

There are, moreover, very few skaters of any pretensions at all, in this country at least, among the lower classes, as we have often noticed on the ice, notwithstanding that as a class they excel in most of the manly exercises, and in rapid skating or running are expert. Yet, when we come to figure-skating, we shall not fear contradiction when we assert that the most graceful and finished skaters come from the better educated, or the middle and upper classes, the clergy and military, and gentlemen belonging to any of the higher professions, being at the top of the scale ; very few of the lower class, as we descend the social scale, knowing more than to "go ahead ;" and when one of these worthies reads the doings on the ice in the daily papers, he doubtless gets somewhat mystified with waltzes, quadrilles, polkas, serpents, pedlar's acres, and birds of every description, as well he might, and small blame to him.

It is, of course, a great advantage to begin to learn to skate when very young, and get over the tumbling when tumbles don't break bones. But a child can be taught little more than forward

skating. In advancing boyhood we may attain the outside edge and rudimentary figures; but our united experience tells us, that it wants the full muscular development of the grown man to become a first-rate figure skater. Therefore let no one think he is too old within reasonable limits to learn the art. A friend of one of the writers, who did not put on a pair of skates until he was thirty years of age, became, by dint of perseverance, a very fair figure-skater.

In concluding our remarks, we would observe that there is such a strong desire to develop the theory into practice that the learner will find a sprinkling of venerable skaters on every favourite resort. Therefore we have no need to urge him to learn, for it is quite true of this art what a brother writer has said, "Non-skaters have no idea of the fascination," &c.

We, however, add this advice: the exercise is severe; it searches out every nook and cranny that contains a muscle in that most marvellously animated machine, responsible man, who, fearfully and wonderfully made as he is, must guard against sudden chills, and by a generous yet simple diet, and slight walking exercise, keep himself in good "condition" by such a mild course of training, for it is only when in such that the full glories of this splendid exercise can be appreciated.

## CHAPTER III.

### GENERAL DIRECTIONS.

SKATING, then, is the art of balancing the body and propelling it over the surface of ice by the action of the feet, when fitted with a pair of one of the various kinds of skates we shall presently describe, which enable the skilful wearer to travel forwards or backwards at a slow or rapid velocity, or to describe a variety of arcs, circles, spirals, serpentines, and other figures and letters in either direction, and either singly or in combination with other skaters.

Our art, when thus highly elaborated, is called "figure-skating," or "figuring," for the reasons we have already stated in the "History ;" and it is that elevated branch which is treated of in this work.

Should the adept condescend to peruse it, we can only hope to recall pleasurable reminiscences of difficulties surmounted, and to set before him others with which he may be unacquainted. He who is less advanced, yet able to skate tolerably well, will, we trust, derive no little amusement and instruction from practising the combined figures,

which will be found fully described. This very sociable and agreeable arrangement of figures is well worthy to be much better known, because it so greatly improves the style of the skater, and shows him, good skater as perhaps he may have considered himself when skating singly, how deficient he is in that accuracy of movement which is the test of his really possessing the command of his skates. From a course of combined figure-skating, he receives a polish and finish that can be attained in no other way, and is prepared to persevere with and overcome the greatest difficulties.

But it is mainly for the beginner that this work is written, in order to teach him how to set about learning this art thoroughly, taking him gradually from the simple to the most difficult movements, giving him a set of general directions to which he may resort for information as to attitude, and the application of the impulse and momentum obtainable, &c., and superadding additional information when the description of each movement requires it. Therefore it is imperative thoroughly to acquire the information contained in the general directions in order that such may be practically carried out on the ice; and it would be well, if possible, to turn the information so acquired to good account by practising with a pair of mechanical skates with wheels in a room, preparatory to studying the "real thing" on the ice, as on such preliminary knowledge will the progress depend.

How many thousands of youths are annually upon the ice who, although anxious to progress, are quite ignorant of the means they should adopt in order to place themselves in attitude, &c. ! Their desire to learn enables them to effect some progress, but this is generally in a wrong direction ; and being without a guide to direct their steps, they frequently acquire bad habits that years of sound practice will hardly eradicate.

Now there are certain characteristics in each skater partaking most strongly of the temperament of the man. All cannot be gifted with the "poetry of motion," which imparts such charming grace. Those who are the fortunate possessors of it will certainly find the path to success a shorter one than those who have it not. But the latter must redouble their efforts to try what careful practice will do in eradicating anything that is ungainly, inelegant, and awkward.

As may be supposed from the preface, we shall not follow the well-beaten track of other authors who have written upon skating, as to what ought to be learnt in succession. Our pupil will have to go from the simple to the most complex and difficult figures upon a systematic plan, and in doing this we have already boldly claimed for the inside edge an honourable place in the system, and in order to make it serviceable have given it an attitude which brings it very near in appearance to the outside. Of course we can hardly hope to

convert all old skaters to our views, but still there may be many who would like to pursue their illustrations of this art to the end: among such we expect converts, for the whole art cannot be acquired without its aid. We have the greatest faith that learners, and even many adepts, who choose to follow the teachings contained in this work, will agree with us that to banish the inside edge from figure-skating is a mistake.

The acquisition of what is contained in the seventh chapter ought to transform the learner into what is generally understood by the terms "a good skater." The next chapter ought to add vastly to this reputation. In the last chapter we have thought it advisable to shunt, as in a kind of literary siding, all those nondescript curiosities of our art which do not come up to the standard of our ideas of first-rate movements. It is here, on account of its qualities, we are obliged to put the once favourite figure of our forefathers—the spread eagle.

But we do not in any way wish to prevent the reader from learning them in his by-play, as some are very curious, and all will tend to educate the feet more and more, and make the skater feel confident. We often see the very best skaters occasionally "larking" with some of these things.

In this country it is very hard to get the amount of practice that is undoubtedly necessary; and therefore the skater must take advantage of every opportunity that occurs, and stick to his practice manfully. A beginner often works hard

at a particular figure all day, and on leaving off seems to have made very little progress, but the real practice is sure to have done him good service, and probably the next day he will find the figure that yesterday seemed impossible come with the greatest ease.

Under the head of "Ice" will be found much that will assist the learner in carrying this out. In addition, he must turn out even before daybreak. A youth may thus get in the morning an hour and a half's practice without taking him away from his regular duties, on his return from which he will get the best part of an hour's day and twilight; and as for a moonlight night, why that is delightful! and even by artificial light skating can be carried on quite easily. He will then appreciate those entire days' skating which somehow or other he is sure to get. To the man who has plenty of time at his disposal we say, "Enviably being, make the most of it." The schoolboys have a good chance in the Christmas holidays, and we all know how frantically they rush to the ice. To sum up, although there is comparatively very little skating in this country, we can speak from our own experience, "When there is a will to learn, there is a way."

#### ARTIFICIAL SUPPORT.

We think, as a rule, all artificial support is a mistake, provided that the ankles of the individual learning to skate are tolerably strong and his temperament courageous; for, though the tyro may at

first tumble about a good deal more without than with artificial aids, he will certainly make greater progress, for the very slips, starts, and scrambles of the beginner, being errors, naturally cause a corrective power to be set up, and the education of the skater without artificial support will, under the favourable constitutional circumstances alluded to, be, we think, much more rapid than with it. We refer, however, those who require such aid to the ladies' chapter.

#### THE DRESS OF THE SKATER.

In considering how a skater should be attired, we have to observe that fashion and custom have not sanctioned, as in other athletic pastimes, a special dress for him, the probable reason being that men rush to the ice before and after business hours, and any peculiar (though comfortable) costume would thus be inconvenient. We need hardly remark that the white cravat, swallow-tailed coat, and pantaloons (the old dress of the Skating Club) are things of the past.

We may also remark that, when a man is about to take violent exercise, no matter what the temperature may be, he, if possible, divests himself with great eagerness of all clothing likely to impede him. Numerous are the instances of this fact, from the peaceful rivalry of rustic games and sports to the deadly land and sea fights. Whilst some, perhaps, may regret the want of a more suitable dress for skating in than that in daily use,

they cannot deny that its absence adds much to the popularity of the art, as it enables all to participate in it. Whilst conforming, then, to the fashion of the day, let the skater take care that his clothes are well fitted, so that the action of the arms and legs is not interfered with. The coat, such as the Beaufort, with rounded skirts and buttoned across the chest to prevent the flapping of the said skirts, will do very well, and better indeed than the frock coat, though, perhaps, not so well as the dress coat. We also recommend a warm vest, flannel shirt, and under jersey, with the trousers tight round the waist, whatever fashion is given to the legs, ordinary warm drawers, and socks of cotton, merino, or silk. The overcoat should be used for coming and going, and standing still, but not when skating, as it is not only unnecessary but apt to make the skater so warm that standing still for a few minutes even may give a chill that will cause a cold.

We must absolutely forbid the use on the ice of the walking-stick, as it is utterly useless as an artificial support for the learner, and excessively dangerous to every one in his immediate vicinity. We cannot conceive how any skater can take delight in skating about with such a thing flying in all directions. It is only useful when hockey is in the case. We now come to

#### THE BOOTS.

We prefer, after numerous trials of all kinds of boots, those of the lace-up kind, with good stiff, or even double, upper leathers, and moderately thick

sole and low heel. These certainly support the ankle far more than any other sort, and permit easy adjustment. A clever bootmaker will turn them out without being clumsy, and if, in wearing, the leather lace should cut the instep, a little pad of flannel may be serviceable. This tendency to gall the instep can be prevented, however, by well using the boots previously to skating; and when they are quite supple and worn to the feet, they should, if somewhat the worse for wear, be put in thorough repair, and kept for the skating season; and when laid by, let them be greased with tallow, or better, mutton fat or neat's-foot oil. In putting the oil on they should be first wetted, and oil applied when they are half-dry.

The next best boot in our opinion is the one with elastic sides.

The sole of the boot should not be too broad, as in laying over on the edges, the side of the boot may come in contact with the ice. And for the same reason the wood of the skate must not be quite so wide as the sole, and it must be thinned off towards the edges. In former days, when our experience was less, we have had terrible falls from neglecting to see to this.

The nearer one gets to the ice, the easier it is to skate, as there is less strain on the ankle; therefore, again, the sole of the boot should be only moderately thick, and the iron of the skate and the woodwork should only be deep enough to prevent

the edge of the foot from touching the ice when on an edge. Although great advocates for broad-soled boots for walking, we cannot shut our eyes to the fact that for skating the sole should not be broader nor thicker than is absolutely necessary for the stability and rigidity of the skate when connected with it, and for the comfort of the skater. Again, if the skates are fastened with the modern cramps, instead of straps, it is absolutely necessary that the boot should fit tight to the foot, otherwise the foot "wings over" in the boot when the edges are being skated.

#### THE SKATE

Most generally in use is made after this fashion : a wooden bed, hollowed out to fit the boot as closely as possible ; three small spikes in the front part of it to enter the sole, and a good screw or pike to go into the heel ; the iron of the skate extending but a trifle beyond the length of the foot, and rounded fore and aft. Its curve we will describe presently. The fastening may be one strap through the wood under the heel, across the instep, and one long strap passing under the wood, and crossed over the foot in the manner shown in the accompanying engraving of this skate (Fig. 2). There are a variety of fastenings, however, but the reader must remember, in exercising his discretion (if he thinks he can find a better method than the

above), that the object is to firmly attach the skate without cumbering the foot, and also bearing in mind that if, contrary to our advice, he intends to skate in a Wellington, or other boot of like light



FIG. 2.

character, he must have more straps in order to fasten both it and the skate securely on.

It is here that the great advantage of the lace-up boot is apparent, for it permits the straps to be

reduced to a minimum, or even, as we shall shortly have an opportunity of showing the reader, dispensed with entirely.

Another kind of skate (Fig. 3) has a piece of iron, about half an inch broad, and as wide as the



FIG. 3.

sole in its greatest breadth, fastened across the wood in the front part of the skate. This iron is turned up and in at the ends, and catches on the outside of the sole, or, as it is technically called, the "welt" of the boot. This iron is called a cramp. Instead of the screw, there is a pike with a notch

fitting into an iron plate screwed to the heel of the boot. This cramp almost does away with the forward straps, and quite so with the three little spikes; there is the heel-strap, however, loosely buckled in case of the iron coming out of the notch; sometimes, also, there is a toe-cap. This skate is easily and quickly put on, but it has the

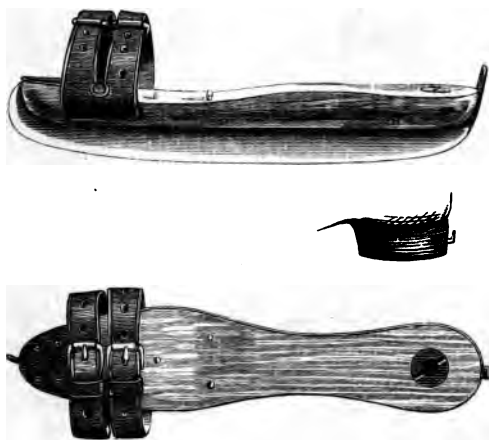


FIG. 4.

objection that the boots must be made and kept expressly for it, and must, moreover, be protected by goloshes when used for walking to the ice, as if the sole of the boot get worn, then the cramps won't bite.

Fig. 4 is a skate that has the iron thinned and bent up at the back. It has a hole in it, and it

hooks on to a short hook that is firmly screwed into the boot at the back of the heel. There may be a heel-strap for additional security, but it hardly wants it. The broad divided toe-strap is the front fastening. This skate is easily put on, and has been very highly spoken of by those who have used it.



FIG. 5.

We now come to a description of skate (Fig. 5) which we can strongly recommend, from the personal experience of one of us, as being most suitable for those who, having a business, calling, or profession to attend to, are yet anxious to get on to the ice at every spare moment.

This skate has, at its heel-end, instead of a screw, a piece of iron so shaped, somewhat as a T (and keyed so as to prevent its position from being altered), that it can be locked into a corresponding hole in an iron plate, which is to be firmly screwed and let into the heel of a good strong lace-up boot. The hole in the said iron plate is to be plugged up with tow or a strip of strong linen cloth when not in use, which is easily removed by a pocket button-hook, the hook part being broken off and ground to a point, or still better, perhaps, by a little steel instrument of the nature of the crochet hook, but very much stronger, shown in Fig. 2. No heel-strap over the instep is necessary (a great relief); a broad toe-strap, divided so as to make two ends, and each buckled over and across the foot, is quite sufficient, as the three little spikes are underneath. The boots can be worn during the frost in the daily occupation; and what with the absence of the heel-strap, and the simple fastenings of this skate, we have not yet met its equal for general convenience. One of the writers has worn such a pair during the late severe frosts continually, and has been on the ice at least sixty times, and that with a degree of comfort which he has never experienced under any other system. The only objection that can possibly be urged against it is that, having straps over the toes, it is not quite so neat as the fastenings without any strap at all.

A notable effort at still further improvement of

the skate with cramps and T combined has been lately made by one of the members of our Club, assisted by the practical skill of Mr. Hill, cutler, of the Haymarket, the maker to the Club, and with some success, but it has hardly yet undergone that test of extended use and time by which its merits could be fully proved ; but, if it

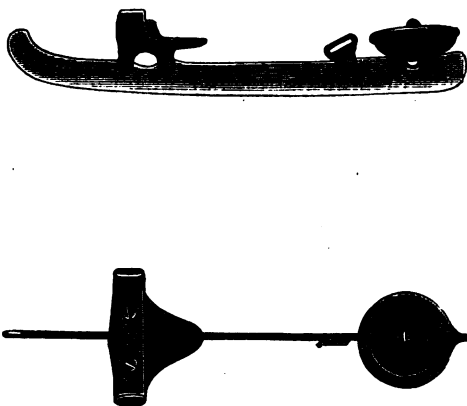


FIG. 6.

stand moderately rough work, the improvement is decided.

In this new skate (Fig. 6), all straps of every kind are done away with ; the cramp described in a previous page is the sole front fastening, and the heel of the skate, on its upper surface, is fitted with a revolving T with a spring catch to prevent its turning. The skate is put on by pushing the

boot into the cramp until the T enters the hole made to receive it in the heel ; the T is then revolved a quarter of a circle by means of a small projecting lever, the spring catch drops into its place, and all is secure.

The boots, we think, will have to be protected with the golosh for the sake of the cramp, and the

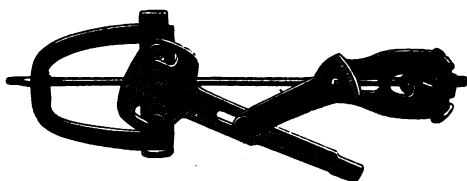


FIG. 7.

ingenious valve cover for the hole in the heel ; and we think that they must be stout also, because all the fastenings are attached simply to the sole and heel of the boot.

Another skate without straps (Fig. 7) has quite recently been invented in Halifax, Nova Scotia. It has the cramp, as usual, but this is most in-

geniously made with a horizontal adjustment, enabling it to be fitted most accurately to any boot. At the front part of the heel three pikes are pressed in by a powerful lever adjustment, which also tightens up the cramp: altogether a most ingenious arrangement. The entire skate is of metal. We have heard that a skater has been known to balance on one leg and take off this skate, and then replace it, without stopping his motion. Surely, then, this is a near approach to perfection, but we have also heard that this kind of skate has been known to tear off upon a rude shock.

Many persons object to the skate being fixed simply to the sole of the boot, as such a fastening causes the boot to feel as in a boot-jack, the weight of the skate always pulling at the boot. A small strap in addition, over the instep, remedies this, and, if skating in elastic-side boots, becomes a necessity.

A word here as to skates entirely of metal. Twenty years ago one of the writers had a pair made from a design of his own, and his experience of them, as compared with those having a wooden bed, compels him to decide in giving the preference to the combination of wood and iron, as absorbing the vibration and jar which is peculiarly observable in the skate formed entirely of metal, the metallic ring of which can be easily distinguished.

We now arrive at a very old-fashioned skate without straps. This has the iron fastened permanently into the sole of the boot, and thus causes the trouble of taking off the regular boots with the thermometer, perhaps, at ten degrees. Fig. 8 shows a skate of this character that can be screwed by short screws on to the sole of a boot.

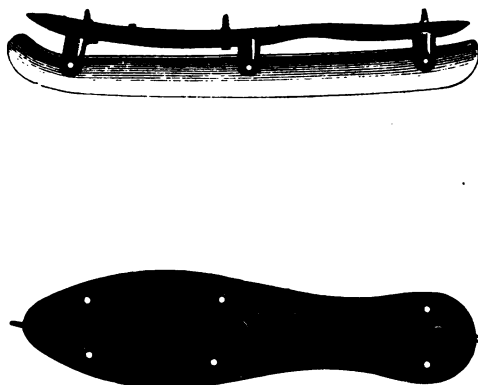


FIG 8.

The next skate on our list is a patent one which has recently appeared in the shop windows; it is entirely metallic, with an open toe-cap and bed, and adjusting screw at the heel, which projects slightly behind, by means of which the skate is tightened longitudinally, and two pikes enter the front part of the heel (underneath the

instep as it were), on the same plan as the Halifax skate.

It is ingenious; and if the projecting screw is altered, and the heel end of the iron rounded, we cannot see why it should not keep in the rank of others of its genus. The description of this skate seems so plain that we consider it unnecessary to give an engraving of it.

The last skate on our list (Fig. 9) is called the "Ladies' Clog Skate." There is no particular reason that we know of why ladies alone should have this complicated adjustment of straps, unless indeed they are popularly supposed to support the ankle. We think the long single strap mentioned in the ladies' chapter far preferable, but fashion goes a great way, especially with the fair sex.

Skates that are used exclusively for running are made longer in the irons, which latter approach more nearly to the flat surface than to the curved one we shall presently describe; the irons are very thin; the ends beyond the toes also turn up, and often project very much in front, whilst the heel is left almost without support. We need scarcely say that these are useless for figure skating; and if they have any superiority for running, it arises from the fact that, being flatter, and the weight of the body being principally on the toes in fast skating, the friction is by their construction somewhat reduced.

Altogether, then, there is a vast variety of skates, varying as much in appearance as in price, from 3*s.* 6*d.* to 56*s.* (including the boot fittings, but not the boots); and, considering that the outfit of the



FIG. 9.

skater costs so little, it is good policy to avoid purchasing those of so low a price as would exclude good materials and workmanship. We advise the learner to begin with a sound ordinary pair of the character of those first described, and which, if

they are country made, may be had of most makers for 12s. to 15s. or more, and, when he finds himself becoming a skater, to fit himself out with the special skates and boots of our fifth description; and these, if fairly used, will last as we have experienced for years.

All the engravings we have given of skates are from photographs of those lent to us for the purpose by the maker to our Club, Mr. Hill, of the Haymarket, London. In case any of our readers wish to know his charges for the same, we append them: Fig. 2, £1 11s. 6d.; Fig. 3, £1 19s. 6d.; Fig. 4, £1 12s.; Fig. 5, £1 12s.; Fig. 6, £2 16s.; Fig. 7, £1 10s.; Fig. 8, £1 12s.; and Fig. 9, the Clog-heel Ladies' Skates, £1 18s.

We have mentioned the name of Mr. Hill as a practical skate-maker of known excellence, but we have no wish to exclude others in London who deal in these articles, whether makers or not. Perhaps the names of Mosely, Fenn, Buck, Priest, Underwood, Thornhill, Lund, &c. comprise the chief, and deserve this notice.

The fluted skate having deservedly gone out of fashion, we only thus allude to it.

#### THE FORM AND CURVE OF THE IRONS.

It is only of late years that skates have been "hogged" or curved to any extent. It is no doubt easier to do isolated threes, both single and double,

in skates that are very much curved ; but when such threes have to be put into a figure where they have not only to be done but the impetus kept up, it will be found that a skate which is less curved is much the best. After doing the threes or other figures, it is easier to keep out, so as to come gradually to the centre, on a comparatively flat skate than on one more curved, which would require all the ability and resources of the most accomplished skater to control from running into the centre prematurely in combined skating, and this effort is the cause of a great loss of power.

The form and curve of the irons then are highly important, and deserve this separate notice. The irons are made either entirely of, or they are faced with, steel, and we generally consider the latter the best. They ought to be most delicately tempered to as high a degree of hardness as is compatible with an absence of brittleness. The difficulty attached to getting the right amount of hardness combined with an absence of brittleness is caused, we believe, by its being necessary to manufacture the skate-blade with the hardest steel, and then by heat to bring down the temper to the required degree of softness ; and as most skate-blades are made partly of iron and partly of steel, they are apt to "buckle," or become curved in the process of cooling, the one metal being more susceptible than the other. Of course, the proper way to manufacture them would be to make them much larger

than they are ultimately required to be, and reduce them by grinding to a true edge.

Being ground across the grindstone or lap (that is, at right angles to the run of the skate), the skate-iron becomes slightly concave on the bottom, whilst the angle, owing to the wedge form of the iron, as seen looking endways, is less than a right one. The edge thus becomes more acute, and is more easily restored when from rough and careless use it is notched or dull, care being taken that the edges are retained of the same height. In fact, the process of grinding the skate-blade across has the effect of slightly fluting it. The final polish ought to be done lengthways, to take out out any little waves of metal. Only those who are in full practice can grind skate-irons well and truly accurate, as it is a process requiring a high degree of manual dexterity.

The length of the irons should rather exceed that of the foot, one-eighth of an inch at each end will suffice; in thickness the iron should be about one-quarter of an inch. Would that we could do with less!

Various curves have been given to the irons, but if, as we have already remarked, too great, or too much "hogged," as it is termed, the skater is rendered unsteady, the curves will not be true, and the skating will get small; evils which are by no means condoned by the turns coming a trifle easier. Skates then should be selected with irons

that are very slightly curved, certainly not more than is given by a radius of seven feet : \* this we can answer for is a curve that readily clears the ice in turning, and, finding this to be the case, we intend to try a curve with even a greater radius. Now Walker, in his "Manly Exercises," talks of two feet for the radius ! Why, this is greater than the American and Canadian "rockers," which are much too highly curved. It has been suggested that the curve should not be an exact portion of a circle, but rather of the ellipse. With this we do not agree at all. The ellipse certainly clears the heel and toe rather more readily in turning than the exact circle, but the heel and toe are the parts of the skate we work the most, and therefore wish them as near to the ice as is consistent with free turning.

Thus, in selecting a pair of skates, attention should be paid to all these points, and notice carefully taken that the iron is straight, not "buckled," a very common imperfection. It should be ascertained also by the skater whether he can fit them on easily, and stand upright in his natural position without feeling his feet cramped. We think we all wear the heels of our boots too high : surely it is not possible for man to improve upon the design of the human foot. Boots with heels one and a half inch high ! If the foot required such an ele-

\* In a recent number of the *Field* a writer suggests a radius of six feet.

vation, certainly the Creator would have bestowed it upon His most finished work.\*

Before we pass on to the practical part of our work, we must not forget to say a few words upon

#### THE CARE OF SKATES.

Let every one, directly the winter is fairly over, get his skates and boots ready for the next season. As a rule, no one thinks about skating until the frost has fairly set in, when there is a general rush to the skate-maker, and the screw or pike that wanted resetting, or the irons that wanted re-grinding, cannot be done; or if they can, it is in so hurried a manner, that they are almost sure to be badly done.

After use, skate-irons should be wiped quite dry, and any symptoms of rust removed with fine emery paper (care being taken not to blunt the edges); they should then be smeared with tallow or oil, the tallow having been first melted and allowed to trickle drop by drop into cold water. This process eliminates any salt that may be in the tallow. If oil be used, the best is two-thirds marrow oil mixed with one-third benzine. On applying this to the iron, the benzine evaporates and leaves a

\* The reason such high heels are required arises from the absurd fashion bootmakers have of making boots on lasts that curl up at the toes. With such a last a high heel becomes necessary; but if any one will try having a pair of lasts made flat at the soles, and the boots made on them with very low heels, the comfort will be found immense.

thin film of oil all over the iron. If the wood-work has not been French-polished, it is a good plan to rub in occasionally plenty of linseed oil, whereby it is rendered extremely hard, and does not get so dirty or discoloured. When the wood-work is stained black and polished, the skates at first look extremely neat on the feet, but the staining and polish soon get shabby. The straps should also be wiped, and hung up with weights attached to them until quite dry, and then greased with tallow or mutton fat, if necessary, before they are laid up in ordinary.

## CHAPTER IV.

### GENERAL PRACTICAL DIRECTIONS.

THE plan of teaching we wish to carry out, is to educate the feet in the most thorough manner, as to the means of getting impulse under all practicable circumstances, and then to work out this impulse in an appropriate attitude, in a balanced position on one foot, introducing at various times all the changes it is practicable to execute, and with as little loss from friction as possible, and to concentrate in these directions a groundwork of instruction, to which the skater may always refer when in doubt or difficulty. As each movement is described in its proper place, we shall add any further instruction that the particular nature of it may require. The main body of directions necessary, and indeed imperative, for the skater to know, are contained in the following group.

I.—The two edges of a skate are called, from long habit, inside and outside (but that they are virtually one in principle has already been explained in the Theory). The inside edge is on the right of the

left, and the left of the right skate. The outside edge is on the right of the right and the left of the left skate, whether the motion be forwards or backwards. The movements of the skate are four, viz. the inside forwards, the inside backwards, the outside forwards, and the outside backwards. It is necessary to learn at once, then, in order to simplify our after descriptions, that—

A represents inside forwards.

B „ „ backwards.

C represents outside forwards.

D „ „ backwards.

Now this can be done in a very short time, and when learnt should never be forgotten.

The four turns which can be made on or from these edges will therefore be designated, for the single variety—

Turn A.

Turn B.

Turn C.

Turn D.

And those containing more turns than one, according to their number, thus—

Two turns A, B, C, or D, as the case may be.

Or,—

Three turns A, B, C, or D.

Or,—

Four turns A, B, C, or D.

Or,—

Five turns A, B, C, or D.

The combination of two edges, as in the serpentine line, will fall under a similar arrangement ; for instance—

Serpentine A.

Serpentine B.

Serpentine C.

Serpentine D.

The eight Q figures also will be—

Q A.

Q B.

Q C.

Q D.

Reverse Q A.

Reverse Q B.

Reverse Q C.

Reverse Q D.

2.—Impulse is gained by what is called striking, which means placing the skate in such an angular position, say  $45^{\circ}$ , as prevents it slipping on the ice ; by such a position a basis of support is gained from which the thrust of the foot or start may be taken : this impulse is obtained from the fore part of the skate-iron, but when the motion is taken up by the other foot, it is the heel end of the skate that mainly supports the skater, and on which he is principally balanced.

3.—There are two distinct ways of striking :

that which is obtained from the inside, and that from the outside edge. When using the inside stroke forwards, the feet are in their natural position, viz. turned out; but in back skating on the inside edge, it is at once apparent that the feet must be turned in. Now this is rather unfortunate, because the position, although very effective, is not very elegant, but for the purpose of educating the feet we must make use of it, as it smooths the path to other aids, and indeed cannot be dispensed with.

In using the stroke to be obtained from the outside, the legs must be crossed one over the other, when proceeding in a forward, and one behind the other, when proceeding in a backward direction, in order that the striking foot may be put down in the necessary position.

A little further observation, and we notice that it is possible to get a stroke from the outside of one foot to the inside of the other, although the attitude is most peculiar, and perhaps this kind of propulsion is only useful to us as another means of educating our feet in impulse obtained by striking in a new position.

The inside strokes are by far the most powerful, but those on the outside are nevertheless very good, especially when they are assisted by close attention to the momentum and weight of the body, as discussed under Direction No. 9.

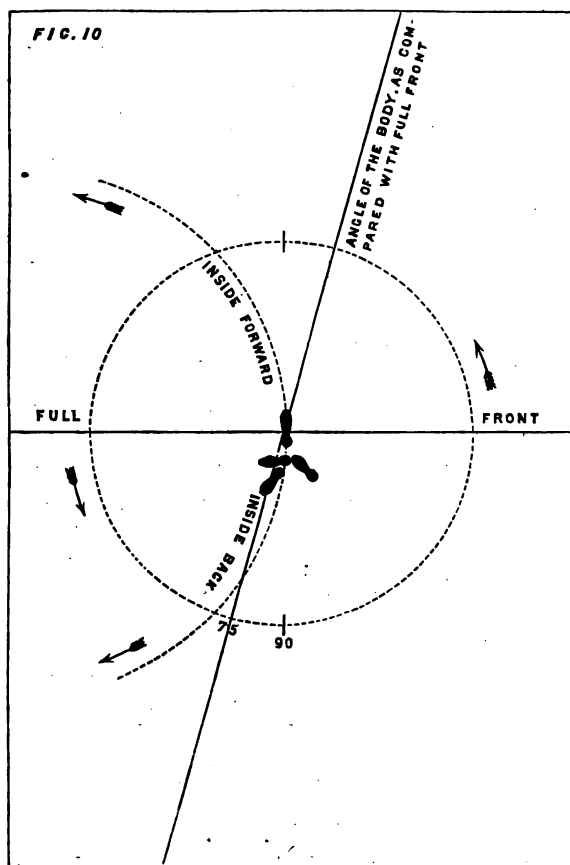
In addition to the two edges, there is the flat

of the iron for travelling on. This is rarely used in figure-skating except as the connecting link that unites the inside and outside edges. To sum up, then, we can make use of the inside and outside indiscriminately, either as a means of impulse, or to travel on, but the flat of the iron only for the latter purpose.

4.—To make a distinction we will call the leg upon which the travelling is conducted, the employed one, and the one that gives the stroke, the unemployed one.

In taking the stroke the knees become bent, but that belonging to the employed leg must be straightened immediately the balance is gained, or even in the act of gaining the balance. Now this straightening of the knee is the most important matter in the career, not only of the youthful, but of the adult skater; it may be set down as an absolute fact, that no man will ever be a really fine skater who cannot do this, for it causes the muscles to hold the ankle, knee, and entire limb rigid, and therefore ensures that great desideratum, a steady balance. It is also essentially necessary, too, on account of the figure-skater being rarely on two feet at a time, and it is one of the two chief means of attaining an upright carriage.

5.—In forward skating on the inside edge, let the body be turned partially sideways; that is to say,  $75^{\circ}$  away from a temporary position, which we will call "full front." The circle consisting of



Plan of the Sideways Attitude on the right foot, when the intended curves inside forwards or backwards are just commencing; also three positions for the unemployed foot.

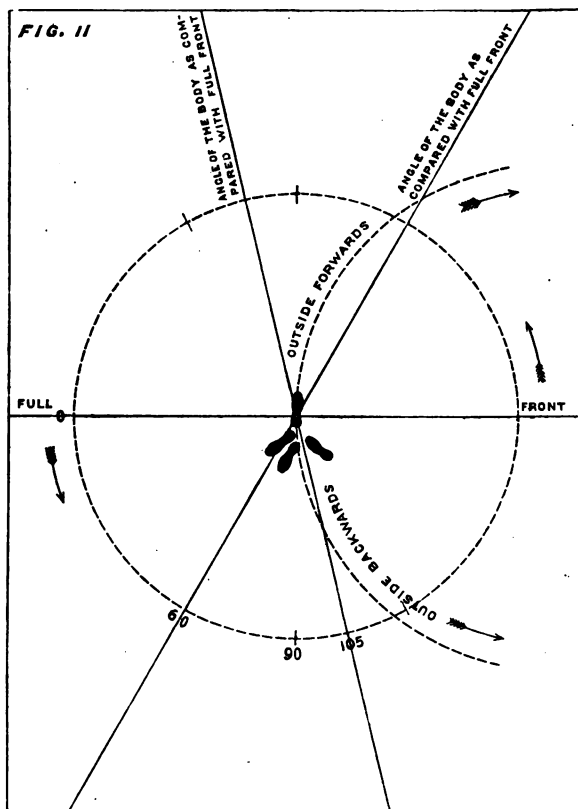
360°, it will absorb 90° to turn the body full sideways from full front, so that we don't want so many; we only require 75° for the purpose of obtaining a partially sideways attitude. Starting, then, with the body placed in this position, the employed or travelling leg and foot remain full front, the unemployed one hangs behind, somewhat in file, as it were, with the foot turned out not less than 45°, and as many more as possible, the toe of the skate held just off the ice, and pointed a trifle down, and the heels of both feet being as near together as practicable; or the unemployed foot may be placed over a little to the right behind, with the toe to the heel of the employed foot: these positions are given in Fig. 10. These attitudes are both very good. We say distinctly that there are two chief means of attaining an upright carriage: straightening the knee is one, and the ability to approximate the heels is the other. Without the combination of these two most excellent qualities, no skater will ever attain the first rank.

For the attitude for inside backwards the number of degrees turned away from full front will be the same, viz. 75°.

For outside forwards, 60°.

For outside backwards, in order to get the body completely round, we shall require no less than 105°. In both back movements the head and eyes must be turned to correspond with the change of

direction; for although the skate travels back-



Plan of the Sideways Attitude on the right foot, when the intended curves of outside forwards or backwards are just commencing; also three positions for the unemployed foot.

wards, we require the body so placed that it in reality appears to go forwards.

In order that the learner may thoroughly understand all these sideway attitudes, we refer him to Figs. 10 and 11; and supposing him to be taking up a temporary position of full front, and keeping his right foot so, let him turn the body and left leg to the left, as denoted by the arrows, until he absorbs  $60^\circ$ ,  $75^\circ$ , or  $105^\circ$  of the circle, according as he wishes to arrange himself for the inside or outside forwards or backwards, altering the direction of the head and eyes, as previously alluded to, according to the respective intended curve.

To get the attitude for the left leg, the body and right leg will necessarily be turned to the right  $60^\circ$ ,  $75^\circ$ , or  $105^\circ$ . To avoid confusion we have not shown this attitude for the left leg in the diagrams, as it is simply the reverse of the other.

To sum up the advantages of this partially sideways attitude: it adds to the impulse when changes are effected, it facilitates the turns, it brings into use and beautifies the much abused and long discarded inside edge, it causes the friction of the air against the body to be very much less, and it enables the skater to employ his resources more advantageously.

6.—The unemployed leg must be kept in an easy manner rather behind, yet in file, as it were, the heels nearly together, and the toe of the unemployed foot just off the ice, and therefore pointed down. Now when about to change feet, the unemployed leg should be brought forwards or backwards, as the case may be, by a gradual movement, com-

menced therefore some seconds before the change required; jerks or starts, which are not at all conducive to grace, will thus be avoided.

The arm corresponding to the leg employed should be raised, but not too high, and never, we think, on a level with the shoulder, and the elbow should be bent; the hand also should be carefully attended to; it must not be clenched, neither modelled after the manner of a wayside finger-post. This arm will thus slightly and gracefully move to assist in correcting and maintaining the balance when changes are taking place.

The other arm, or that which belongs to the unemployed leg, must hang easily down at a slight angle, away, yet in file with, the body, and not raised nearly so high as the other, and it need not be moved about unless absolutely necessary for the purposes of balancing, as it should be the aim of the skater to keep it quiet.

The unemployed leg and arm are thus near the body, and are balanced by the employed arm, which is slightly away. We often see skaters stooping very much, and what follows as a necessary consequence? This: that the unemployed leg must be thrust out behind nearly horizontally, and consequently far away from the ice, and the unemployed arm must partake of an attitude alike in its nature, in order to effect the necessary counterpoise; all this being radically wrong, as may be seen by contrasting the elegance and effectiveness of one atti-

tude with the ugliness of the other. And ugliness is not its worst quality only, as it has also the sad defect of hindering, hampering, and retarding the skater's actions.

7.—The changes of attitudes as to the arms and legs might all be practised with a pair of mechanical skates with wheels, in a room or gymnasium, where also, by a central post, and long leather strap depending from it and attached to the learner's waist, it would be easy for the would-be figure-skater to study the effect of the different inclinations of the body without fear, and with an immense saving of valuable time on the ice. Thus standing in the positions described in Direction 5, let the skater practise the attitude for each foot respectively; then let him notice the slight alteration in the direction of the head and eyes which becomes necessary when the curve is intended to be of the inside or outside character. Then let him observe how the striking foot will require to be moved into its place immediately its work is done (see Figs. 12, 14, 16, 18, 20, 22). At the same time let him see that the changes required of the arms are carried out simultaneously and harmoniously with those of the legs, for the alternate stroke. The crossed positions, or those in which impulse is obtained from the outside, will also require practice; and when these outside strokes are intended, the skater can refer to pages 132—136 for a further insight into their character.

8.—In leaning over to catch an edge, the foot, leg, and body must form an imaginary straight rigid line, placed on either side, as the case may be, and inclining away from the perpendicular, and held in that position by the laws we have discussed in the Theory. There should be no attempt at coaxing the edge by a twist of the ankle, for this cannot give the true steady balance which is attained by using the above-mentioned position, because, the imaginary rigid straight line being destroyed by such bending of the ankle, the position will be imperfect.

9.—The impulse gained by the act of striking can be vastly increased by a proper use of the momentum of the body. It is the application of this to other inherent good qualities, that educates a man up to being a first-class, graceful, and powerful skater.

The weight of the body should be well thrown into the skate at the instant of effecting the stroke, or of making a turn or change. The new edge then taken, will, by the natural rebound of such an excess of pressure, be executed with far more lightness and power than it otherwise would be.

In order to carry this out it is necessary to give a slight elastic spring (yet never removing the skate from the ice), almost imperceptible, and in reality forming a part and parcel of the movement. It is not easy to explain, but, in a few words, may be described as a kind of *vertical momentum* of the body.

The next sort of impulse is obtained by a horizontal motion, inclining the body to the direction opposite to that in which the skater is advancing, and then at the instant of the stroke throwing it in the advancing direction, and raising it in a few seconds smoothly to the upright attitude. For example, supposing the skater wishes to make a very vigorous stroke, or a succession of them, forwards or backwards, he would whilst on one skate gradually draw himself not only upright, but even inclining a little backwards or forwards, and at the same time he would be preparing for the above-mentioned slight spring the instant before the stroke ; the body would then be inclined suddenly yet gracefully forwards (or backwards, if the motion be in that direction), and the weight of the body at the same time thrown into the striking foot ; the new edge would then be taken easily and lightly, but at the same time with great force. In back-skating it is just the same, and it is by such means that the skater is enabled almost to disguise the stroke and skim over the ice, and keep up a long and difficult movement with very little loss of the impulse derived from the original stroke. Any skater deficient in these two great aids is soon "pumped out." Some imagine that skating to be graceful must be entirely slow and stately, and that speed will destroy grace of carriage. How narrow this reasoning! We will take one instance. The flight of the swift is estimated at

80 or even 100 miles per hour at times. Every one must have watched its turns, curves, and circles, and how often have they been without elegance and grace? In short, grace of carriage in a skater, can in our opinion be enhanced more by alterations, variations, and contrasts of speed, than in any other manner. But in making use of speed the skater must be as *au fait* at the figures thus done, and do them with the same ease, as if he were skating them slowly.

10.—The inside and outside edge, both forwards and backwards, should be learnt on a very large scale, even at the commencement. Not so, however, with the turns or threes, which can be begun with little impulse and of small size, extending the size of them as progress is made. The skater must not forget that skating can never be too large to be good.

11.—In making the forward turns or threes the weight of the body should rest on the fore part of the skate-iron; in making the backward turns on the heel. (By forward turns we mean those from a forward edge; by backward turns, those from a back edge.) Again, the weight of the body should be eased off at the moment of change, by using the above-described slight imperceptible spring, the instant before. This will diminish the friction of the iron upon the ice.

12.—Whatever practice is done once on the right foot, in the way of figures, should be repeated twice

on the left. The skater will thus become equally able on both feet, and not, like very many skaters, unable to do justice to the left.

This habit of practice must be early acquired, as there is a strong tendency in all young, and even adult, skaters to use the right or strong leg very much more than the left or weaker: this naturally causes a great defect in the learner by making him better on one leg than the other, and thus renders him unable to take his part in good combined figure-skating, which is always conducted as much on one leg as the other.

The learner should observe all good skaters most closely at every opportunity, and there is no reason why he should not go through a course of drill when the ice does not bear; let him don his mechanical skates with wheels, and learn what to do. Look at the volunteer rifleman: he learns to shoot in proper position, (which goes far to make a good marksman,) before he fires a shot at the target. Let us take a lesson from Hythe, then. We can certainly say that a good skater is generally a sufficiently "good fellow" to willingly assist with his advice and example any tyro who is really anxious to get on.

To summarize the main points that will constitute a first-class skater, as treated of in these directions, we have:—

1. The straightened knee.
2. Approximation of the heels.

3. The semi-sideways position of the body.
4. The vertical momentum.
5. The horizontal momentum.
6. The forward turns on the toe.
7. The backward turns on the heel.
8. Double practice on the left leg.

Qualities which give necessarily—

1. An upright carriage.
2. A graceful unpretending attitude.
3. A steady and perfect balance.
4. Powerful and accurate skating.
5. Facilities in making turns.
6. Equality of power on either leg.

## CHAPTER V.

### ICE.

WHAT a difference there is in ice! This is occasioned by the way in which congelation has been disturbed by wind, snow, partial thaw, return of frost, &c. Ice appears also of different shades of colour, owing to the above causes, and the situation of the pond, lake, &c.

Ice is well known to be so much lighter than water, that, in rough figures, one-third of the entire thickness appears above the surface of the water when it is floating.

A very severe frost, without snow or wind, will produce ice intensely hard, very dark in colour, generally a blackish green, yet also very clear, very much like the colour of wine-bottle glass; or if it is frozen at a comparatively high temperature, say three or four degrees, and if there is at the time of congelation no wind, it may have quite a greenish cast, and be of a greasy nature. We are aware, of course, that both such kinds of ice are in themselves nearly colourless; yet that they do, owing to various causes, appear to have these well-

known characteristics, is a fact which will be acknowledged by observing skaters.

This dark-coloured ice is the ice, *par excellence*, upon which the accomplished skater delights to disport himself; but it is not so good for a beginner, who has not yet obtained the command of his skates: so he had better select ice, if possible, a trifle less smooth and hard.

Snow ice, as we call it, is sometimes very rough and weak, as it is full of flakes, hollows, and air bubbles. But should there be a rapid thaw, followed by a return of frost without snow, very good ice is formed, the colour being grey or white, and the surface level, and not too hard, unless frozen at a very low temperature.

As to the thickness at which ice becomes bearable, we believe, that one inch in thickness of the black clear variety will under favourable circumstances be safe for a few skaters, not congregating together; three-quarters of an inch will bear the generally light weight of boys of fourteen years.

The snow ice, however, is very treacherous, and must be of considerable thickness, say two inches, before it is safe, and then only so long as the process of freezing is going on. Snow ice, being studded with air-bubbles, becomes, even when very thick, unsafe in a thaw, and gives no warning of the breaking-up, as the dark-coloured clear ice does.

The *Montreal Gazette*, alluding to the thickness

of ice and its strength, says, "Ice two inches thick will bear infantry; four inches, cavalry, with light guns; six inches, heavy field guns; and eight inches, the heaviest siege guns, with 1,000 lbs. to the square inch:" but we must remember that ice at Montreal is frozen at a much lower temperature than it is here, and consequently is much denser.

We have always made it a rule to go in search of bearing ice the morning after the second night's frost, and never to take for granted the positive assurance of others, "that it could not bear yet." We have thus got many an hour's safe skating.

We are aware that we shall be called to task by fathers and mothers of families for thus giving our sanction, as it were, to boys to go on the ice prematurely, and we therefore wish to express more fully our views; we say then to them, "Your boys and girls will want to go on the ice: don't deny them the healthy amusement of learning to skate, but let it be under your own supervision. Make it one of your pleasing duties towards them to look out some safe pond and safe ice upon which you can conscientiously permit them to go at an early period of frost; let it be only with your sanction that any other piece of ice is chosen," and we cannot think that any harm will come to them.

Where then can we find this safe ice at an early period? On marshy exposed commons, which are yet screened from the disturbing winds by gorse, &c., it is possible to find bearing ice at a remarkably

early period of frost ; the water on such wet ground is, as a rule, only a few inches deep : we do not, of course, allude to ponds or pools in such situations, as these are generally flooded gravel pits, perhaps six or twelve feet deep, and therefore very dangerous,—of such let every one beware.

A shallow pond, situated on high ground, and yet in a circular depression or amphitheatre, will generally freeze rapidly. A little previous inquiry and experiment before the frosts set in may often be the cause of a day's safe amusement to the young ; and is it not much better that they should have it under supervision, than be left to themselves to hunt about for ice, not knowing the depth of water under it ?

In this country, after three or four days' average frost, the ice rapidly gets safe for a number of skaters ; at the end of a week it will be almost unbreakable. After a month's frost, there will always remain at its final break-up a week's safe skating. The surface is wet, but still hard enough for our purpose—indeed the friction appears less—and some delightful skating may be had at these times. We must remember that ice is a bad or slow conductor of heat, and therefore receives it back tardily, and thus remains bearable for some time. Unaware of this many skaters imagine that the moment a thaw comes their practice is all over, the fact being that there is often good skating, even in the rain, for the enthusiast ; and every learner

who afterwards becomes a good skater really is, or ought to be, that.

One of the writers has skated, in school-boy days, as early as the end of October, on a pond on Mitcham Common, Surrey, but then only for a few minutes. The 13th of March has been the opposite extreme in London. He has also skated on a Good Friday afternoon, and has seen skating in London continued every day of six consecutive weeks.

Ice may be kept in tolerably good order by artificial means, and a good many falls thus averted; sweeping, scraping, levelling, and flooding, are our great agents. Sticks and stones, grit and dirt, must be removed, the three latter being very injurious to the skates, and all of them excessively dangerous to the skaters. Such, too, hinder progress, for there can be none made whilst either from weak or bad ice, or from the above obstructions, there is a perpetual fear and excitement, at the anticipation of a ducking or a severe fall. The remedy for which is simply to go, if the ice is young, or decaying from a thaw, to very, very shallow water, and keep the ice in good order by removing *impedimenta*, and never indeed go to deep water under any circumstances until the ice formed on its surface is two inches thick, and even then it is advisable not to go alone. If skating be practised on private ponds, a long light ladder and ropes should be brought down to the banks, for with

such simple means much may be done to rescue the drowning, by pushing the ladder over the hole.

If in actual danger of breaking through, it must be remembered that the best possible position is the horizontal one, flat on the ice, with the legs and arms extended, spider fashion, thus bearing and distributing the weight of the body over a larger surface.

With all these precautions skating, otherwise a rather dangerous pastime, may be divested of all extraneous matters that are the chief causes of its being so. The "jolly good tumbles," even, by the gradual progress of the learner, get fewer and fewer, until at last he is enabled, as far as depends upon himself, to travel safely over the ice at a high velocity.

A word as to the late terrible accident on the ice in the Regent's Park, when forty persons unhappily perished. Does ice give warning of its dangerous state? Did it on the occasion of the above lamentable accident? We can say from our experience that it always does, if the ice is pure and unmixed with snow, and that it did on that occasion. The signs are these: bending ice is not dangerous so long as any cracks in it are few and far between; cracks may be of great length, without rendering the ice dangerous; but it is when these main cracks, which are healthy, begin to be joined by other cracks, and these again are intersected and bisected, until the ice assumes the appearance

of a latticework or network of cracks, that the disease is great, and the danger imminent; small pieces will push through, water will bubble up from holes, a wheezing, creaking sound, caused by the broken edges grating together, is heard unmistakably, and this is the final token of its break-up, which it then does in a moment: but who can say without warning when there are all these signs (which we have never known to be absent in pure ice) to be observed? The snow ice is vastly more treacherous, notwithstanding its generally greater thickness. The movements of a crowd of people continually running up and down the ice is its severest trial, which must in the end disintegrate it unless it be very thick indeed. On ice that is skated on by many people, even in a hard continuing frost, a great many long dry cracks appear, some of them half an inch wide. No water comes up, but they are most dangerous to the figure-skater, as if, in going at a high velocity, his skate get caught longitudinally in one of these, a severe fall is sure to ensue. These cracks should (after the final sweeping at night that all good ice should receive) be carefully filled up with water.\*

#### OF THE SUBSTITUTES FOR ICE.

How is it in this scientific age, that there has been invented no artificial ice since that which was

\* A better plan still is to fill the cracks with snow, which should then be partially melted by the application of warm water.

laid down many years ago at the Baker Street Bazaar? Wonderful chemical discoveries are constantly being made; are we never to have a cheap salt that will crystallize from its solution (and re-crystallize for repairs), and hard enough to bear the cut of the skate-iron, and suitable in other respects? One of the writers skated in his ordinary skates on the above artificial ice, and it was possible to do all simple figures, and even the double 3, but the exertion was great; an hour on it was equal to four on real ice. When he had a fall, he was covered with a greasy kind of composition, which added much to the unpleasantness of the "jolly good tumble." This artificial ice cut up in white dust like ordinary ice. He does not know what it was composed of, but one of the ingredients was evidently alum. He thinks it was repaired by means of a warm iron passed over the surface. The whole room, where it was laid down, was some forty or fifty feet diameter, and most prettily arranged; snow-clad mountains on the walls, artificial icicles depending from a rustic shed, where he put on his skates, and the delusion carried so far as to have an imitation hole in the ice, or rather an actual one, for it had real water underneath. He wishes it had had better success, or could now be resuscitated and improved.

Perhaps a composition of the nature of hard soap, and wooden skates, with a wooden slip instead of the ordinary iron, might answer.

## THE MECHANICAL SKATES WITH WHEELS.

This is another attempt at a substitute for the "real thing." Skates with wheels are by no means a new invention, having been used at the theatres many years ago. They have, however, recently come back to us from America in the shape of an iron frame, with four or five iron or wooden wheels, about half an inch broad, and an inch or an inch and a quarter diameter, covered with galvanized india-rubber, and running on spindles underneath the foot, the skate being strapped on in the usual manner.

A skating floor or hall was opened lately in the Strand, and also at the Floral Hall, Covent Garden; and to the latter place some members of our Skating Club were invited at its opening. One of the writers skated at both these places; he went rather prejudiced against the idea of wheels as a substitute for skates, but was surprised how much might be done with practice,—the outside edge forwards and backwards, and even the crossed position and the figure 3. The friction is enormous, owing to the extremely rough and rude manner in which these skates are got up; and consequently the exertion is great. He saw a gentleman skating with a pair of highly finished ones, made by himself, as he understood him, at Messrs. Penn's factory; and these, having steel wheels, ran very well, very different from the common ones. Many of our

readers will remember Jackson Haines, the champion skater, who performed some wonderful feats at the Alhambra Palace on wheeled skates.\*

A friend, with whom one of the writers has had much conversation on the subject of substitutes for skates, suggests that the skating-floor should be of wood, placed up edgeways of the grain, as in the wood pavement, and that the steel wheels should taper to a nearly knife edge.

As one of the writers has tried his ordinary skates on artificial ice, and also skates with wheels on a wooden or an oil-cloth flooring, he gives his opinion in favour of the former.

\* Haines, the so-called "champion skater," performed some wonderful feats on mechanical skates, but it was apparent that he did all his performance with great exertion to himself.

## CHAPTER VI.

### FIRST STEPS.

LET us suppose that the learner, by means of the General Practical Directions, has thoroughly grounded himself in what manner he is going to act, and let us hope that he has often walked about a room with his skates on, and can readily adjust them, and that he has practised, too, with the mechanical skate with wheels, but that now he is going to make his first attempt on real ice. The first thing is to fasten on the skates, firmly yet comfortably, and to stand up carefully on the ice. Don't let him try, expect, or wish to do too much at first ; let him be humble, for he is sùre to be humbled. Let him keep himself as upright as he can ; but he must lean a little forward for safety. Let the feet be turned out very slightly, indeed only just sufficient to give a hold on the ice. Now let him attempt to walk forwards at the slowest pace, and with the shortest possible steps, taking care when the foot is planted on the ice, and whilst the other is being lifted, to keep the ankle and knee stiff: he will thus prevent the ankle from

twisting sideways, a common fault with the beginner. Again, great care should be taken to prevent the feet from getting apart sideways, which they will at first always have a tendency to do. After very few of these cautious steps, the beginner will find that he has a feeling which impels him to slide forwards on the flat of both his skates, after the manner of a slider: this should be encouraged by all means, until a standstill is come to, when a fresh start can be made. Now let the feet be turned out rather more, which will permit greater force to be used in the stroke or push, when doing the same kind of work. It must be observed that when the sliding begins, which will very likely be on the flat of the iron, the feet must be kept parallel, or they will spread apart. If this tendency cannot be prevented by ordinary correction, it can always be stopped by resuming the stepping, and taking up the sliding at a more favourable moment. An hour or two carefully spent in these preliminary lessons will enable the learner to commence the inside edge forwards on the edge of the skate. As the same directions serve for both feet, to avoid repetition, we shall confine our description throughout this work as much as possible to one only, viz. the right.

#### THE INSIDE EDGE FORWARD.

The feet should be turned out at an angle of 45°, and that forward portion of the inside



THE INSIDE EDGE FORWARDS.  
CORRECT ATTITUDE.

*[Plate I*

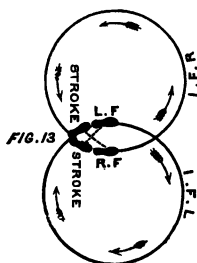


THE INSIDE EDGE FORWARDS.  
INCORRECT ATTITUDE.



have already seen) to be taken up by the right foot alone, with the sliding action, and on the inside edge of the skate, that being the edge upon which the skater will then naturally be. This foot being either straight before him or slightly turned out, he should endeavour to balance entirely on it for a short time and distance, and then bring the left (which up to this point should have been kept behind, *vide* Directions) forwards, and strike with the right, taking up the sliding motion with the left, and balancing on it in the same manner, and so on in alternate strokes.

As the skater gains confidence, his aim must be to travel as far as possible on one foot before setting down the other; if successful, first the quarter of a circle, and then the semicircle, will be described on the ice. When the balance is still more enduring, he will be enabled to make a very large spiral, like a watch-spring on a gigantic scale, which figure is a splendid lesson in balancing. Two complete circles, made on either foot alternately, will form the first of the series of numerous figure 8's which can be done in skating.



In order to gain the greatest amount of confidence, the beginner must practise, for speed, by vigorous strokes (applying the vertical and hori-

zontal momentum) of one, two, three, and four yards' interval ; and, having attained great velocity, finish out with the largest possible spiral, which will gradually bring him to the centre and to a state of rest in a perfectly upright position. Of course, in doing this movement, one foot only should be used, the other should be kept off the ice from the commencement of the spiral to its conclusion. From the nature of the spiral on the large scale, it is a grand method of acquiring a true and steady balance (see Fig. 48), and we strongly advise the learner to work at it until he has completely mastered its difficulties, which are very much lessened by employing the sideways position (*vide* Directions) and by keeping the leg behind. These two attitudes correct the great tendency (which is almost unavoidable in the old and ugly attitude) to curl round too soon.

As we have begun to go pretty fast, we must notice by way of precaution,

#### HOW TO STOP.

We see no objection to beginners even having skates with rounded heels. With reference to these it used to be said, "Oh, you can't stop yourself; if you see a hole in the ice, you can't stop." The best answer to this is the general introduction of them, and the fact that, by placing one foot before the other at right angles, the skater can stop as easily as by the old plan.

If a man has been accustomed to skate with square-heeled skates, and changes them for round, he must be careful, or, forgetting his round heels, he will be elevating his toes to stop himself; and the result will be that he will find himself "on the broad of his back."

When the old-fashioned square-heeled skates are in use, stopping (which, it must be remembered, can only be done when going forwards) is effected, as we have said, by lifting up the front of both skates, and consequently digging the sharp unrounded heels into the ice, and sending forth a shower of spray, accompanied with a loud disagreeable grating noise. This clumsy and ugly old method does not always answer, for frequently the performer overdoes it, and finds his feet flying up and his head down, and he finally alights in a well-known attitude; at the same moment he learns, from the pitiless laughter of the bystanders, that he has cut out that too well-known and painfully remembered figure, the star.

One of the writers was, some years ago, skating with a gentleman who had had his skates altered from square to round heels, and was charmed with the change. The piece of ice was large, and he descried in the distance the fair form of his intended, accompanied by several friends, whereupon, in his most graceful style, he skated as fast as he could towards them. Getting close alongside, he put out his hand for the loving grasp, and, for-

getting his newly rounded heels, simultaneously elevated his toes, expecting to bring himself to a graceful state of repose ; instead of which he came down an "awful cropper," charging feet foremost in the most undignified way into the midst of the fair bevy, and scattering them in all directions. But, of course, if skating is learned on rounded heels, the skater would not be tempted into the indiscretion of our unfortunate friend.

The figure skater who uses skates rounded at both ends can stop himself short, even at considerable speed, by placing the unemployed foot boldly down in front of and at right angles to the line of progress, at the same time bending and leaning the body well back from the direction in which he is advancing. He can also skid one skate, or even both, by turning them slightly in, or he can place one across and behind the other, and so let it drag. When he is a good figure skater, he has a host of resources in the turns and serpentine lines by which his course can be deflected, reversed, or arrested, but he ought to make himself master of the method of stopping by putting the foot across the line of progress ; because he can thus instantly avoid a hole in the ice, or any unforeseen obstacle, which may be suddenly presented to his onward progress.

We now come to

## THE TURN ON BOTH FEET,

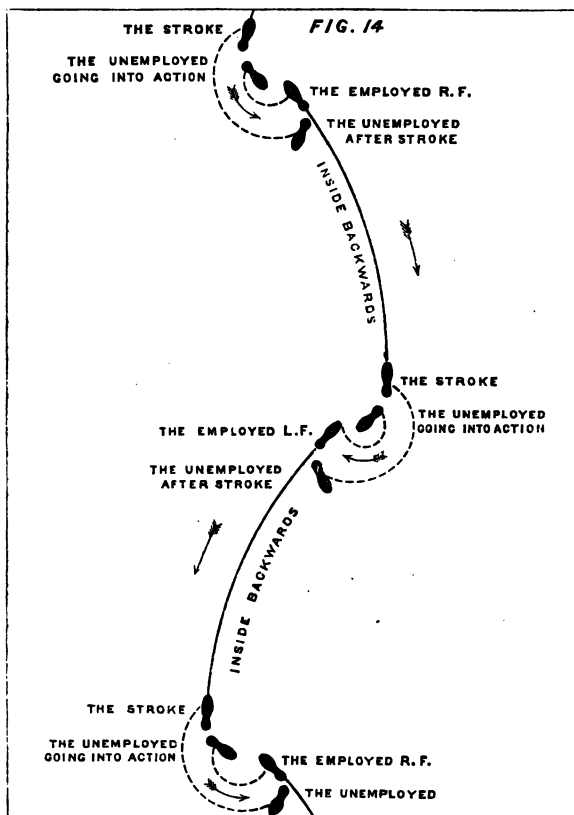
Which is done almost on the flat of the iron. The acquisition of it will tend very much to increase the nerve of the learner, and will be of great assistance in enabling him to practise the backward movements, as it easily, quickly, and safely changes the direction from forwards to backwards, or backwards to forwards, at any obtainable velocity; and this before he has acquired the confidence, which long practice alone gives, to make such a change on one foot only.

After a few strokes, let the beginner slide forwards on both skates, then by a somewhat sudden half turn, either to the right or left, reverse the skates and the position of the body, pressing at the same moment principally on the toes, in order to clear the heels, upon which he will afterwards mainly rest; he will then proceed on both feet backwards in a straight line from whence he started, until his impulse is exhausted. Then let him again start forwards in the same manner, and when he has mastered the turn, which he ought to do in a very short time, he can learn it from backwards to forwards; and, finally, combine the two directions in one movement. Whilst carrying out this kind of practice, the body is necessarily full front.

## THE INSIDE EDGE BACKWARDS.

This may be taken up from the above turn by continuing on both feet backwards; then by turning

the left slightly in, and pressing the ice with its inside edge, let the sliding be taken up on the



Plan of the Inside Edge backwards on the right and left feet. A moment before the stroke the unemployed begins to move into action. The foot that has given the stroke then becomes the unemployed. See the arrows and dotted lines.





THE INSIDE EDGE BACKWARDS.  
CORRECT ATTITUDE.



THE INSIDE EDGE BACKWARDS.  
INCORRECT ATTITUDE.

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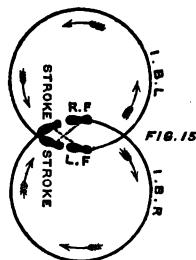
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right alone in the sideways attitude, and let the skater continue on it in a large curve as long as he is able ; this impulse exhausted, he should quickly bring his body up to full front, and pass it again to the sideways attitude applicable to the other foot ; he should simultaneously with this change of attitude put down the left foot (which will thus become the employed one), and give a bold stroke or push from the inside of the right, which for this purpose must be slightly turned in (Fig. 14).

The sideways position will thus undergo a continual alternation, in accordance with the use of one or the other leg, and from the complete change required the skater must make the intervals of striking as long as he can ; the skating will thus be large.

After a while he will be able to make two alternate circles, which form the second 8 on our list (Fig. 15). To ensure perfection of balance, it will be necessary to execute the large spiral ; this can be accomplished by taking a sharp run forwards, then the turn on both feet to backwards, and half a



dozen alternate back strokes to obtain velocity : this gained, the skater, poising himself in the sideways attitude, should continue in the largest spiral possible until he comes to a state of rest.

This is the new style of inside edge backwards,

and was designed by us as a substitute for the old, which we cannot recommend, but which is done after this manner :—The stooping body is full front, the feet are turned in, the knees bent, and striking goes on as fast as possible. The skater is literally “backing,” his face and body being turned from whence he came, and not, as it ought to be, in the direction in which he is going (and, indeed, while adopting this ugly attitude, it cannot be otherwise). He sails away, however, at a smart pace until, if the skaters are numerous, he is suddenly brought up with a concussion, which displays to his vision a shower of mimic fiery shooting stars, almost rivaling the real ones of the heavens in rapidity of movement and brilliancy of coruscation. To see two skaters, as one frequently does, “backing” from opposite quarters, and brought together by some curious affinity that seems to affect young skaters, is certainly a situation most ludicrous. We refer the reader to Plates III. and IV. which illustrate the difference between the correct and incorrect attitudes in skating inside backwards. For a further description of the old inside edge backwards see also next page.

Few indeed, very few, learn the inside edge properly, either forwards or backwards ; it is generally hurried and slurred over by those who think they will become good skaters more readily by practising the outside and excluding the inside edge.

By and by, however, when they advance in skill,

and become aware that several parts of fine movements consist of the inside edges, they are unable to participate in them with the ease of others who have adopted a more systematic way of learning. It is of the last importance that the skater should ground himself thoroughly in the method of getting impulse by the changes of the feet and body on the inside, as well as afterwards on the outside edge, as this will enable him to develop all the resources of his art when keeping up long and difficult figures, instead of coming to an inglorious standstill in consequence of inability to make use of the despised inside edge. We are afraid the inside edge is only known to very many skaters as forming the concluding part of their figure 3, which we call 3 C. Why, we are not surely debarred from it because we can skate it *per se*!

We freely admit that there is greater beauty in the outside, yet we contend that the sideways attitude gives the inside a totally different aspect to that which it has when done "full front;" in fact, causing it to approach at once by a giant stride to the outside, and but slightly in arrear of its merits as a "thing of beauty." It is the miserable attitude generally given to it that has brought it down so low in skating estimation, and rendered it thereby hitherto so little serviceable to figuring. The inside edge has generally been learnt with the body full front, the unemployed leg suspended out at the side, and ready to be used as a prop (which, in truth, it really appears to be), whilst both knees

are bent, arms everywhere in the compass, and the thick stick (that is but too often carried) is frantically struck and stabbed about in all directions, rendering the performer, by his energetic efforts applied to mistaken purposes, almost an object of compassion. Who does not remember the capital description of sliding and skating in "Pickwick," when the impostor Winkle comes to grief by steering himself, against his will, into a reel which was in full swing? The uncertain skater, who knows not where he is going to, is rather a dangerous customer. If a man wants to skate backwards, he should at least learn to do so in a manner that will enable him to see where his skates are taking him.

Contrast then by an ideal picture the old inside with the new. In its new form the skater is without a stick, the knee of the employed leg is straight, the unemployed leg is kept behind, the heels are nearly together, &c. ; the body is turned much away from full front, the head not so, however ; as to the arms, one is slightly raised, the other hangs gracefully down behind, and slightly away from the body, but it, the arms, and the legs are, as it were, in a position, sideways to the line of progress.

As this skater advances towards us, we immediately detect that the unsightly prop is gone, it has disappeared ; he appears to lean over unprotectedly, which thus, at once, gives the inside the dress of the outside, by causing that appearance of danger from falling which is its characteristic.

## CHAPTER VII.

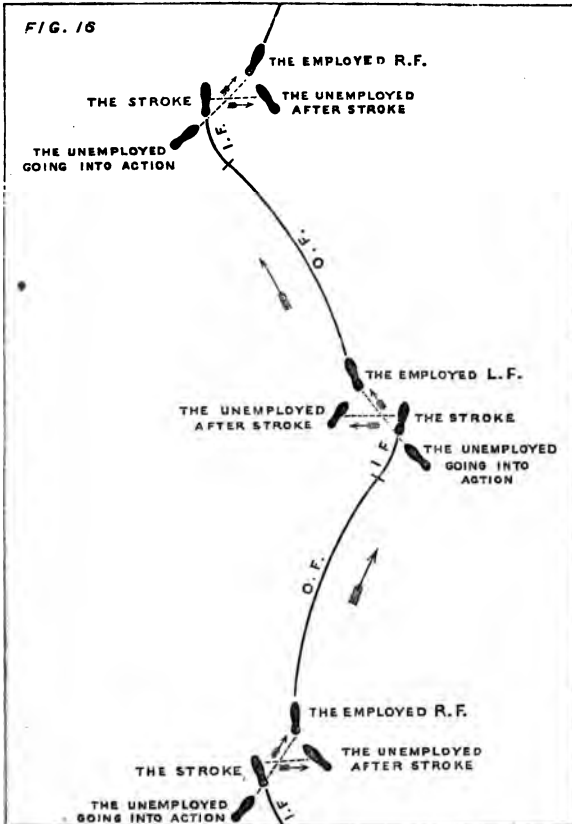
### FIRST STEPS.—(*Continued.*)

#### THE OUTSIDE EDGE.

THE attention and ambition of the learner is always prematurely directed to this, by the remarks of his friends, who tell him, that when he can do it he can easily master everything else in skating. This may be true so long as he confines himself to the limited movements of former years: the simple figure 3, and the outside forwards or backwards. But it stands to reason, when he wants to combine both edges, and graft in and link with them several turns in movements of great difficulty, that unless he has learnt both edges thoroughly he will be, in the language of the turf, "nowhere." And therefore, we say, it is unwise and premature to direct the attention of the skater to the outside before he has "passed" in inside. That is not so, however, with the learner who has followed us thus far, and become completely versed in inside. Then, indeed, **he may turn with pleasure to learn the very beautiful movement, the name of which heads this chapter; a movement to acquire which, has called forth from a few writers on skating some of the most extra-**

ordinary and absurd directions. We can hardly imagine such a delusion, as to put two or three pounds of shot in the skater's pocket to help him to the side he wants to go or lean to ! Yet that is one of the methods recommended. But we will leave such nonsense, and turn at once to what we consider to be the most natural, easy, and proper method of learning it, which is this. Let the learner skate somewhat in the usual manner round the circumference of an enormous circle (we say "somewhat," because the outer leg will be on the inside edge, and the inner leg either on the flat of the iron or on the outside edge) so large a circle ; then, that he can but just feel the outside of the one and the inside of the other skate. After having by this means obtained impetus, let both feet run together in the parallel curves of such a circle at intervals, and for some yards without striking. Now when he does this, as one skate must be on the inside and one on the outside, he has only to ease off the weight of the body more and more from the foot describing the inside, until he can entirely raise that skate from the ice at the moment he feels steady, and the problem is solved. When he can do this, he can strike with the unemployed foot (the outside,) thus keeping up and increasing the impetus and centrifugal force. If he has sufficient nerve, let the unemployed foot be used entirely for pushing himself round and round. In bolder moments, in order to gain practical experience of the manner in which he is sustained, the beginner should occa-

sionally turn his skate a little more in towards the centre he is working to, and he will find that



Plan of the Outside Edge forwards. The stroke is given on the inside, therefore the curves at their forward extremities become inside. A moment before the stroke, the unemployed begins to move into action. The foot that has given the stroke then becomes the unemployed, &c.

the centrifugal force immediately increasing, desires to place him in a moment upright, or, if we may use the expression, in a safer position, for a learner who has not acquired sufficient balance to dwell longer on the edge. A few of such occasional trials, and the beginner will have no fear of falling, because he possesses the antidote to it in this great and valuable power of correction.

The inclination of the body depends upon the size of the circle and the given velocity. What scope is there not for practice in the knowledge of this?

The direction of going must of course be altered for practice on the other skate.

Having acquired the edge thus far, the tyro must now resort to bolder measures, by striking direct to the outside in alternate large curves on either foot (Fig. 16), acquiring at the same time the sideways attitude, which up to this moment he has doubtless neglected, notwithstanding it may have

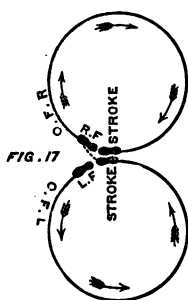


FIG. 17

been practicable at various times in the preliminary lessons; in this manner he must accustom himself to skate about the ice. He will afterwards easily describe two alternate circles, and thus form the third 8 on our list (Fig. 17). Finally he will practise for greater boldness by taking a run forwards, and when at great velocity striking out, and so on to the





THE OUTSIDE EDGE FORWARDS.  
CORRECT ATTITUDE.



THE OUTSIDE EDGE FORWARDS  
INCORRECT ATTITUDE



outside for the gigantic spiral, which, when he can complete to a state of rest without ever touching the ice with the unemployed foot, the learner may consider he has mastered the outside edge; certainly not before. Hence the value of the spiral as a test figure.\*

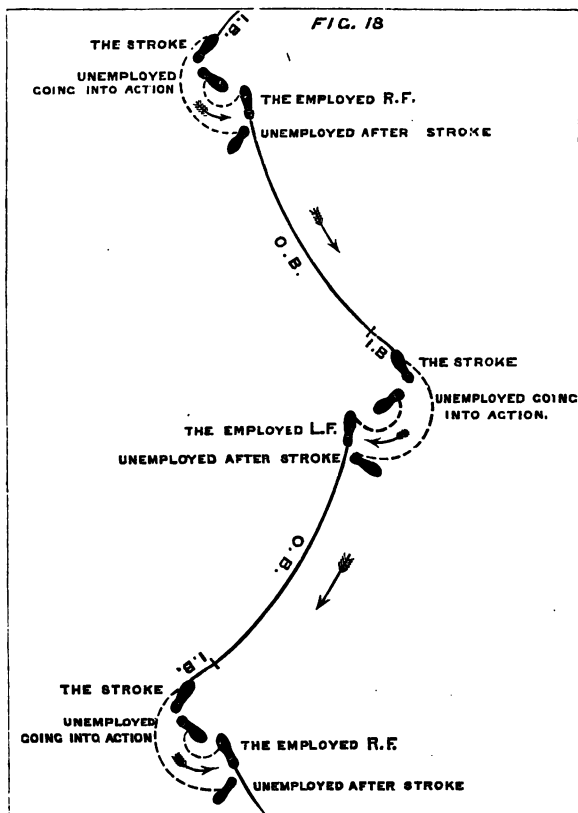
In alternating from one foot to another on this outside edge forwards or backwards, the striking is invariably done on the inside, so that this latter edge is gained by leaning over from the outside at the moment the change, from travelling on one foot to striking with the same foot (in order that the travelling may be continued on the other), is made. Thus this is the earliest lesson of the use of the two edges on one skate, and which will be fully entered into in Chapter VIII. In the present instance its employment is so very transitory that it merely deserves this passing allusion. Such a change of edge cannot, however, occur on that variation of outside known as the "cross-outside," for in that (as we have described in the General Directions) the stroke is from the outside.

The Dutch and others skate to market on the outside, making very long curves, consequently getting very little on the edge.

In England it is also called, in the old books on skating, rolling, for which we suggest a reason, viz. its resemblance to the rolling of a hoop or coin or

\* Another excellent method of learning the outside edge forwards, should the skater require it, is given in the chapter for the ladies.

loose wheel, also the rolling of a ship in a sea. Again, a drunken man is said to go "rolling down



Plan of the Outside Edge backwards. The stroke is given on the inside, therefore the curves at their rear extremities become inside. A moment before the stroke the unemployed begins to move into action. The foot that has given the stroke then becomes the unemployed.

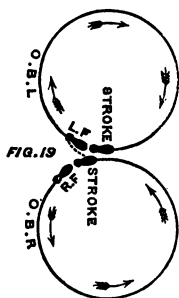
the street," and this by reason of his swaying from side to side. It is the same idea, no doubt, that gives rise to the application of the word to the cross outside.

#### THE OUTSIDE EDGE BACKWARDS.

To learn this equally fine movement we shall adopt a similar plan to that recommended for learning the outside forwards, skating backwards, of course, instead of forwards, round the circle. Impetus to effect this may be obtained by forward inside strokes, the turn on both feet to backwards, and a few back strokes; then let the skater continue with both feet, running in the parallel curves of a very large circle, and let him practise the art of easing off the weight of the body from the foot that is on the larger curve (the outer) until he can gradually lift it from the ice; impetus must be sustained by occasional strokes of the same foot, or, if more convenient, a fresh start made. The sustaining power of the centrifugal force can be experienced by turning the foot that is describing the outside, a little more in to the centre, so as to make somewhat suddenly a smaller curve; this will immediately give the skater a practical proof of the certainty of such movement, restoring the balance if in danger of being lost.

Having thus far acquired the edge, the alternate large curves should be struck in the sideways attitude (Fig. 18); next, the circles which make the

fourth 8 (Fig. 19). The closing practice should be the swift run forwards, the turn on both feet to



backwards, and the immense spiral to a state of rest without touching the ice with the unemployed foot; this will test the attainments of the learner in outside backwards, which on the large scale is a very fine and bold movement, and moreover a safe edge to be on at the highest velocity.\* It must not be forgotten that the weight of the

body should be on the toe-part of the skates, in forward edges, and on the heel, in back edges. Want of nerve in throwing the weight of the body well on to the heel is the cause of the great difficulty that is experienced in learning the back edges.

We now arrive at

#### THE CROSS OUTSIDE FORWARDS OR BACKWARDS.

The feet and legs in these movements are crossed in the act of striking. Therefore everything takes place on the outside edge, and to compensate for the unusual and somewhat disadvantageous position of the feet and the less vigorous impulse obtainable, it is necessary to pay great attention to the remarks in General Direction 9,

\* Another excellent method of learning the outside backwards is given in the Ladies' Chapter.





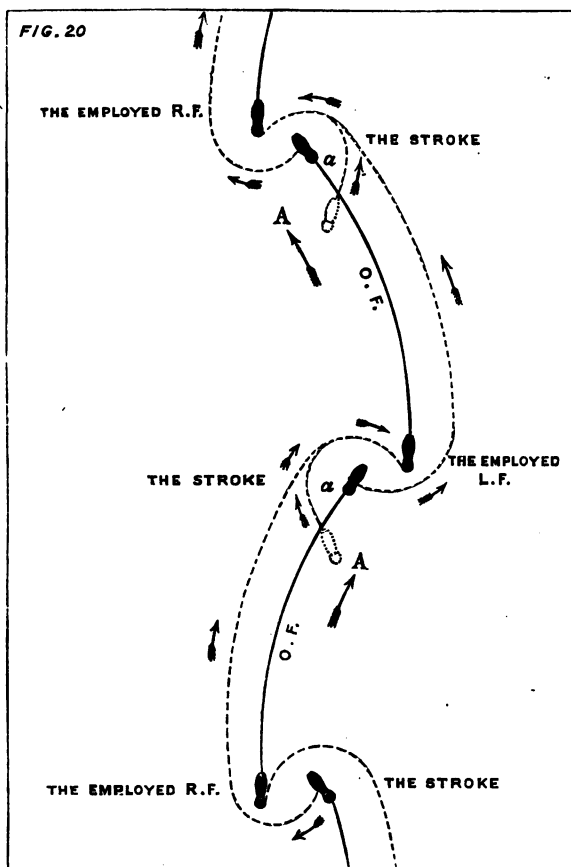
THE OUTSIDE EDGE BACKWARDS.  
CORRECT ATTITUDE.

*[Plate IV.]*



THE OUTSIDE EDGE BACKWARDS.  
INCORRECT ATTITUDE.





Plan of the Cross Outside forwards. The stroke is given on the outside. The dotted lines and small arrows represent the gradual course of the unemployed after the stroke until it becomes in its turn the employed. *Aa, Aa*, a different course for the unemployed foot, used in combined skating.

so as to make the utmost use of the weight and momentum of the body. When this is done, the impulse is very considerably increased.

We have also to bring into more important action the hitherto unemployed leg, which must be gently and evenly swung round the employed one in such a manner that it arrives exactly at the proper time and angle to be put down, and so become the travelling one (Fig. 20).

Besides these matters, we must look to the proper alternation of the sideways attitude, which in this movement works in admirably.

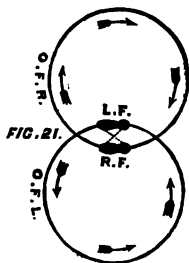
When the skater has become somewhat proficient in these cross movements, he must begin to learn to disguise the act of striking as much as possible, so that they may be skated without apparent effort. Now to do this requires a particular degree of tact, which pages of writing cannot exactly explain. The power is there; it lies in the angular position of the cross; it wants developing by a certain amount of the most careful practice, particularly directed to the setting down of the striking foot so accurately at the angle of the circle to be described, that it shall want no after alteration, dropping, as it were, on to the proper edge at the proper curve. Unless this is done, the power of the stroke is lost in a moment. Another essential point to be remembered is the application of the weight of the body on to the stroke, and in the direction of the curve to be de-

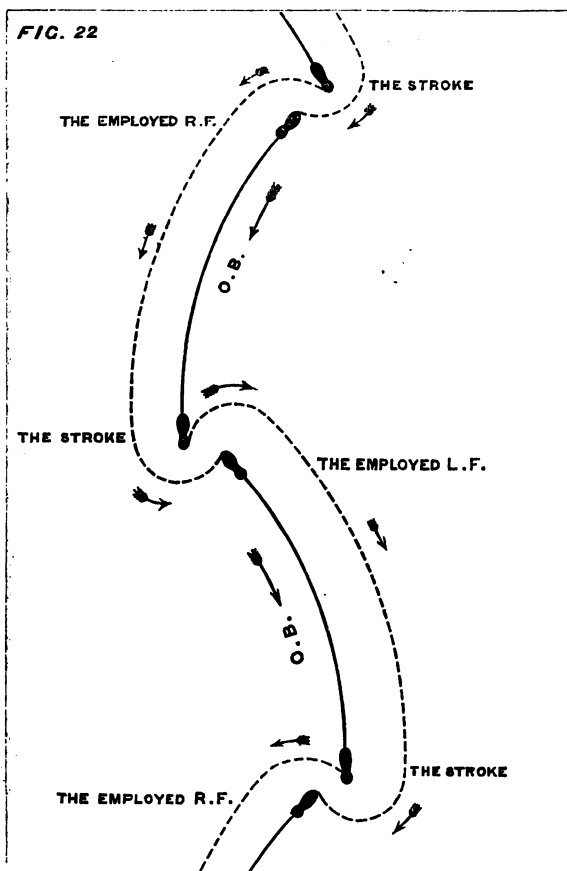
scribed. By such means the skater will acquire the art of sustaining, on good ice, the back 8's for an indefinite number of times, a feat which is well worth the practice required, it being the most difficult movement we have yet arrived at ; it is a grand lesson in the art of preserving and maintaining impulse under a new and most difficult position—in short, another test figure. We therefore consider the cross movements a very fine study. They cannot be learnt in a short time ; to be perfectly learnt, the skater must be prepared for an energetic and persevering practice of them, as, unless done with apparent ease to the skater, they are ungainly and worthless.

We now proceed to describe how to carry out

#### THE CROSS OUTSIDE FORWARDS.

Travelling slowly forwards on the ordinary outside of the left leg, let the skater swing the right gently round in front of and across the left, and, placing it down in the position applicable to the curve to be described, strike from the outside of the left ; now, travelling forwards on the outside of the right, let the left leg be swung gently round in front of and across the right, and placed down in its turn, and so on. The practice will naturally be small at first,





Plan of the Cross Outside backwards. The stroke is given on the outside. The dotted lines and small arrows represent the gradual course of the unemployed after the stroke, until it becomes in its turn the employed.

but it must be the study of the skater to increase the size as soon as possible, and also to endeavour to make two complete circles alternately, and he will then have the fifth 8; and to make this 8 so that sufficient impetus be sustained to continue the movement, great dexterity must be attained (Fig. 21). The finish must be as large a spiral as practicable, which teaches the unemployed foot a new lesson in stopping behind crossed, until the state of rest, or the usual attitude belonging to the sideways position, is attained.

#### THE CROSS OUTSIDE BACKWARDS.

Travelling slowly on the ordinary outside backwards of the left leg, let the right be swung gently round at the back of and across the left, and placed down in that position, and the stroke made from the outside of the left; then, travelling on the outside backwards of the right, the left should be swung gently round at the back of and across the right, and placed down in its turn, and so on (Fig. 22). The tendency of the practice will be even smaller, at first, in this than in the forward cross; but by sticking to it, it will gradually become possible to make the curves larger. The two alternate circles for the sixth 8 (Fig. 23), which the skater must learn to keep going, must then be tried; for these self-sustaining 8's, whether forwards or backwards, are, as we have already said, the test of a

skater's power in that direction. In putting the foot down in these movements care should be taken, not only as to the turning

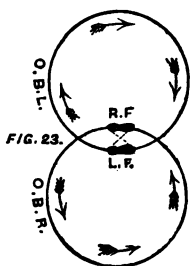


FIG. 23.

out of the toe in the direction of the circle to be described, but the heel, and not the toe, should in backward movements first come in contact with the ice. It has been known long ago that a particular arrangement of these curves will design on the ice a figure closely resembling an an-

cient or Indian bow. Thus, we will say, a curve of two yards on the outside of right, a small curve of one foot in length struck on the cross outside of left, and another, two yards on right, will show it.

## CHAPTER VIII.

THE COMBINATION OF THE INSIDE AND OUTSIDE,  
OR VICE VERSÂ, FORWARDS OR BACKWARDS  
ON ONE FOOT, CALLED ALSO THE SER-  
PENTINE LINE.

THIS brings us to some very fine movements in figure-skating, which, until the last fifteen years, have been unaccountably neglected, and, when practised at all, not half developed. To the majority of skaters their beauties are unknown. Perhaps we ought not to have said "unaccountably neglected," because the reason is plain, viz. the contempt and disuse of the inside edge, which participates in their composition in an equal degree with the outside.

Of the vast field of novel practice that arises from an accurate knowledge of the serpentine line, when combined with the single and double turns, we have treated in Chapters X. and XI. At this stage of the learner's career, we require the knowledge of it to give us the power of controlling the skating, which naturally produces that great desideratum—steadiness of balance. This steadiness of balance is indispensable in the acquisition

of that correctness which is required in the simple figures that follow, and still more so in the combined figures.

The study of the serpentine line will enable the learner to alter the size of any curve by making it either smaller or larger, or to convert it into a straight line, and again into the opposite curve to that with which he started, &c., proceeding all the time on one foot, and in an attitude fixed, save that the body tilts or leans over from side to side. Now, from the very nature of such a wonderful performance being possible, it contains the very essence of the art of balancing the body, in all the various gradations from inside to outside, or outside to inside, in large or small curves, circles, and even in unwinding, as it were, spirals, and thereby forming a loop, which latter will be afterwards separately described. The velocity, whatever it may have been at the commencement of the serpentine, must always be gradually diminishing from the operation of friction both of the ice and air.

At the first glance at the subject, we might almost be justified in assuming that, if a skater were equally proficient in inside and outside, he ought to be able readily to unite the two. Such a theory is found to be worth little, however, for it requires very great additional practice to master the combination of such movements on one leg, without help from the other. No amount of written instruction can avail, beyond informing the

skater what is to be done and how to set about it, and reminding him of the following few facts closely connected with it.

First of all, then, velocity may be carried to such a pitch in skating, that, if we wanted to describe a small circle, we should not be able to lean over sufficiently to counteract the centrifugal force, from the simple fact that the skate-iron would no longer bite the ice, but slip. Not so, however, with the larger circle, which can be fitted to any velocity. Secondly, velocity and the size of the circle, or curved line, determine the inclination of the body. Thus, supposing velocity to continue nearly the same, and we wish to alter a small curve to a larger one, &c., we must incline less and less, as the size increases; we shall then reach the perpendicular, and be on the flat of the iron, from which the transition to the curve opposed to that we started with will be marked by a reversed series of changes, leaning over more and more, and diminishing the size of the curve. The result of such a gradual blending will be the serpentine line. We can, of course, stop at any intermediate angle of inclination between the two possible extremes, and also repeat the changes several times,—that is, supposing we started with and keep up sufficient impetus to enable us to do so.

The practice must be, at first, at high velocity, in order that the curves may be very large and deviating but little from the straight line, decreasing,

as progress is made, the velocity, and consequently the size, even to semicircles or still more acute curves, and yet keeping the skating large and bold ;



FIG. 24

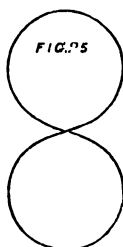


FIG. 25

for when these qualities are absent at any time, or in any movements, the skating invariably assumes a hurried, fidgety, and fussy appearance, that looks as bad as may be.

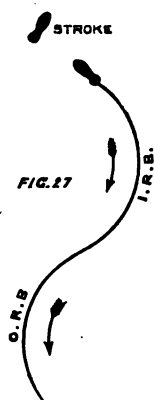
The back movements can be taken up after a run forwards, turn on both feet to back, and a few alternating back strokes.

To represent an S (Fig. 24) or a snake, is an easy matter. The test figure is the 8 (Fig. 25), done very much as we write it, and combining two full circles or curves of an opposite nature linked together. This kind of 8 can be done two different ways, on each foot forwards, and two on each foot backwards, that belonging to the outside of the latter being the tenth 8. The sideways attitude is found to work most harmoniously in uniting the two edges. Great attention must be paid to the unemployed leg, which must be kept behind in its proper place, and not be permitted to indulge in a series of little short kicks, which (ludicrous as the effect is) may often be observed, even in good skaters, when the change of edge is made upon an unsteady balance. This action of the leg is, however, most

useful, because it points to something radically wrong in the arrangement for the balance, and warns us to look at once to its correction. We may remark that in learning (and we say learning advisedly) the changes of edges, the bringing forward of the unemployed foot at the instant of the change, will be found of great assistance in forward



SERPENTINE A, ON THE INSIDE AND OUTSIDE FORWARDS.



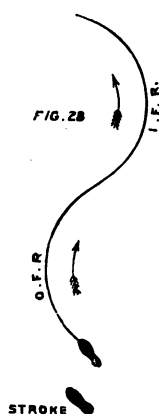
SERPENTINE B, ON THE INSIDE AND OUTSIDE BACKWARDS.

movements, as will also the throwing it back in back movements. The most difficult changes are from the inside forwards to outside forwards, and from inside backwards to outside backwards.

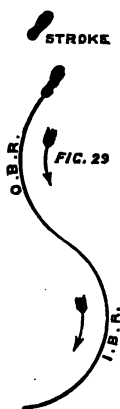
#### DESCRIPTION OF THE FOUR SERPENTINE LINES.

Serpentine A (Fig. 26).—Let the skater commence on the inside curve forwards, then raise the

body from such inclination, on the principles already described, until it passes the perpendicular, and leans again to the opposite or outside curve. This naturally gives the serpentine line, in which, having become perfect on both feet forwards, the skater must proceed to learn the others, thus:



SERPENTINE C, ON THE OUTSIDE  
AND INSIDE FORWARDS.



SERPENTINE D, ON THE OUTSIDE  
AND INSIDE BACKWARDS.

B (Fig. 27).—We here commence on the inside curve backwards, change, and lean over to outside backwards.

C (Fig. 28), again, is done by commencing on the outside forwards and leaning, after the change, over to inside forwards.

D (Fig. 29) is commenced on the outside back-

wards; and the change being made, the body is inclined over to inside backwards.

Then, to make a double change, A and C or C and A, and B and D or D and B, can be united. Then A and C, or C and A united, can be skated alternately on each leg.

B and D can be skated in the same manner.

A and C, or C and A united, can also be done in the same way, but the practice should be varied by using the cross impulse where feasible.

B and D, or D and B united, can be skated after the same fashion.

These, with the figures already alluded to, complete this fine study, which we now leave to direct our attention to

#### THE FOUR TURNS.

Turn A from the inside forwards.

Turn B „ „ backwards.

Turn C from the outside forwards.

Turn D „ „ backwards.

These turns are a means of changing the direction of going from forwards to backwards, or from backwards to forwards, on one foot, without the assistance of the other.

The edge consequently is altered; thus:

Inside forwards will be changed into outside backwards;

Inside backwards into outside forwards;

Outside forwards into inside backwards;

Outside backwards into inside forwards.

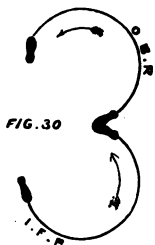
Now comes an important point to understand, viz. that in these turns the inclination of the body sideways from the perpendicular is not changed (another proof of the unity of edges). In the serpentine line we have had a complete change of the inclination, not so in these turns; it remains the same. Any of them will, with a little prolongation of the anterior and posterior portions of the curves upon which they act as a pivot for the skater, make a figure 3 of a trifle more than two semicircles; and if the reader places a pair of compasses in such a manner as to strike the curves from their respective centres, he will find the limb of the describer at the same inclination.

Thus are they contradistinguished from the serpentine line, in which we can only alter the edge by an alteration of the inclination. But in the turns under consideration we arrive at the same result by merely reversing the skating from backwards to forwards, or *vice versâ* (the direction being the same), and not by altering the inclination from the perpendicular sideways (save of course from any loss of velocity, or other cause).

Observing closely the mark or nick left by the skate-iron on the ice at the turn, we shall find it a remarkable counterpart of that in the middle of a 3; we can thus see that it turns upon a pivot, yet passes over the flat of the iron, the first edge being thus lost, and the new one taken up at an angle with the old of some  $45^{\circ}$ .

The first thing we have to do is to attend to the attitudes according to the edges in use, by blending the two at the moment of making the turn. The sideways attitude works well here, the advance of the shoulder and part of the body which is in rear being a great aid. We refer the reader to "General Directions" for remarks upon turns, momentum, &c. &c.

Turn A (Fig. 30) can be performed by describing any portion of a curve of inside forwards on the right foot, and the balance being on the toes, the body should be quickly turned partly round and back, to the skater's left; at the same time the skate should be partly reversed, in accordance with the change the position of the body has undergone, until it catches the ice on the outside backwards, on which the skater may continue at pleasure, taking care to remember to throw the balance or weight of the body on the heel, as soon as the turn is completed. The same should be done on the left foot, turning the body and skate to the right. This turn is not difficult to execute when small circles are described, but it should be the study of the skater to make them as large as possible.

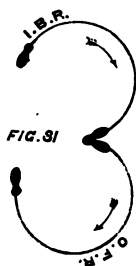


TURN A, ON THE INSIDE  
FORWARDS.

This is an excellent turn, because the skater can, by availing himself of it, place himself at con-

siderable speed direct on to the outside backwards, even after obtaining impetus by a smart run forward. It has, however, a tendency to place the skater very hard on the back edge, and consequently in a comparatively small curve. This very tendency, like other features we have noticed in skating, points to the necessity of a strict attention, not only to the balance, but to the turning out of the toe of the unemployed foot in order to prevent the skates having the mastery over the skater. The great corrective is the above described position of the unemployed leg, and the power of the serpentine line.

Turn B (Fig. 31) can be skated by describing any portion of a curve of inside backwards, the balance being on the heel; and when the change is to be made the body should be quickly turned partly round and forward, to the right, at the same time the skate should be partly reversed in the same manner as described in Turn A, until it takes the ice on the outside forwards.



**B.** TURN  $\lambda$  ON THE  
INSIDE BACKWARDS.

Same for the left, turning the body and skate to the left.

To do this turn neatly and steadily, when going with the considerable velocity gained from a long run and a long sweep of inside backwards, is the boldest and almost the greatest difficulty in the

art. On a small scale, and at a slow pace, it is comparatively easy. Perhaps we ought to define what we mean by a small, as distinguished from a large scale. Curves of a yard will be small; after two yards the skating will begin to get large and the difficulties of this turn rapidly increase. At six yards we shall have a fine performance. When we can fairly lay claim to the title of a good skater, will the velocity required for equal curves of ten to twenty yards, or upwards, be too much for our steadiness? It ought not.

This particular turn is the one from which such very severe falls occur to learners, from the fault of not balancing on the heel, when on the inside backwards. If this is not done, the front of the skate-iron is prevented from sweeping clear of the ice the few degrees which it ought to do without touching, until it rests on the outside forwards, whilst the body has probably been already turned: a check at such a moment is almost sure to prove fatal, and the result, a severe fall on the hip, certain; whilst by turning on the heel end this danger is completely avoided. But it requires considerable nerve in a beginner to force himself into this, the really safe position, as he feels that if everything does not go right a fall will ensue, at a time when he, being turned partially sideways, cannot save himself with his hands. The doing this turn, when it can be done with confidence, is one of the most pleasurable sensations in figure-skating.

Turn C (Fig. 32) is skated by describing any portion of a curve of outside forwards, the balance being on the toe, and when the change is to be made the body should be quickly turned partly round forwards, to the right; at the same time the skate should be partly reversed, until it takes the ice on the inside backwards.



TURN C, ON THE OUTSIDE FORWARDS.

Same for the left, turning the body and skate to the left.

This turn is the figure 3 so well known to all skaters, some of whom, alas! never get beyond it; the outside forwards and this identical 3 being looked upon, by them, as the *summum bonum* of the art. One writer calls it a reservoir of power, and quaintly says that when a skater does not know what to do he turns this 3. We, too, can sing its praises. It is truly a handy turn, and well deserves its popularity, and, if there were no other movements to be learnt in skating, we should not wonder at its being so used up. It claims our respect also from the probable fact, that from this turn (by reason of its being the easiest) the idea of skating the other turns has emanated.

Turn D (Fig. 33) is skated by describing any portion of a curve of outside backwards, the balance being on the heel; and at the moment of change, the body should be quickly turned

partly round forwards, to the left, at the same time the skate should be partly reversed in the same manner, as above described, until it takes the ice on the inside forwards.

Same for the left, turning the skate and body to the right.

The usefulness of this turn, like the others (except Turn C), is only known to the few really good skaters. Like everything else, it wants considerable practice before it is possible to do it neatly. Suppose a skater, placed by any previous movement at great velocity on the outside backwards, on which, continuing for a while, he wishes to get to the inside forwards for some purpose he has in view, this is the turn to use.

This turn has, like a previous one, a tendency to place the skater too hard on the inside edge in a comparatively small curve, the great antidote to which is the power of the serpentine line, and the sideways attitude of the body. The skater is also very apt to lean very forward, when placed on the inside forwards, which has also the tendency to make the circle small. Keeping the heels together is the remedy for this fault.

At this part of our practice we have become aware that the two turns, A and C, afford every facility for changing a forward run into a backward motion, whilst B and D change back movements



TURN D, ON THE OUTSIDE BACKWARDS.

into forward ones, all on one foot, thus enabling us to dispense with the turn on both feet for all except movements at the very highest possible velocity.

These four turns should be practised at first upon a small scale ; then, by means of two semi-circles, they can all be made to exactly resemble the figure 3 as usual, or in reverse.

By slightly altering the curve (the power of doing which we have gained by the knowledge of the

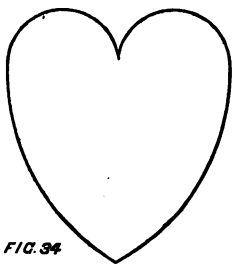


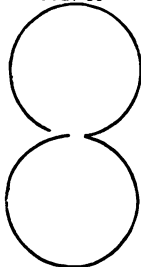
FIG. 34

THE TURN OR 3 IN THE FORM OF A HEART.

serpentine line), we can actually mark out a tolerable representation of a heart or double heart (Fig. 34). A chance this for the slighted Brown, Jones, or Robinson ; instead of the commercial 3 he can, in her presence, with his dexterous skate-craft, depict the icy-cold heart of the

adored one, with a certainty that will, we trust, soon thaw that of "the gude lass."

FIG. 36 \*\*\*



THE TURN OR 3 IN THE FORM OF AN 8.

By making the turns or 3's as usual and in reverse (all on one foot), so that the curious marks or nicks stand close in and opposite each other, we shall be able to add four more 8's, making the number of this ubiquitous figure amount to fourteen (Fig. 36\*\*\*).

Should the skater find any unusual difficulty in making these turns, he is

permitted, whilst learning, to swing the unemployed leg in the direction necessary to assist him ; but we hold that no skater is perfect in turns, who cannot dispense with such aid, and keep the unemployed leg behind in its usual attitude, save in all those instances in which the employment of cross-striking necessitates an advantageous employment of it. Some writers have said that the unemployed leg acts like a rudder, to steer the skater by its swinging. That such kind of action is indispensable to turns we deny. To disprove it we have often skated the difficult Turn B with the heels touching.

And now for a few words on the method of practising turns, for it is quite certain that Turn C, because it happens to come so readily, and is so easy to alternate, is the favoured one ; the others being either unknown (a not unlikely matter), or difficult to get at readily, are, as a rule, discarded by skaters. We wish to put the reader in the way of learning them all, as distinct separate turns, executed without any twist or curl on, and he will thus gain an amount of steadiness and accuracy which will surprise him, and enable him to turn when he likes, and not when the skates like, as is too often the case. If we think, as we undoubtedly do, that the outside edge is a great step towards figure-skating, and that the serpentine line is another great link, by its power as a corrective, we also conceive that these four

turns, by uniting the forwards and backwards or backwards and forwards movements, complete necessarily a certain fundamental part of skating. He then who can pass this Rubicon will be prepared to conquer all after difficulties, to which we shall have the pleasure of directing his attention.

Turns that are not easy to alternate *per se* can be made so, by coupling them with those that are more handy. Thus, suppose the skater start with a stroke from the left foot, and thence make Turn A on the right (which would bring him on the outside back), by crossing the legs behind, and by making a stroke from the cross outside of right, and putting down the left on the outside back, he would be enabled, when on that edge, to do Turn D, which being done, will bring him on to the inside forwards, from which Turn A can be taken on the right foot again. Turn C will also work D. Turn B can be taken up after a Turn C: thus being left by it on the inside back of the left foot, the right can be put down on the inside back, on which Turn B can be skated; and being left by it on the outside forwards of right, the legs can be crossed, the stroke effected, and Turn C skated on the left from the cross, taking up B as before. Besides this method of alternating turns, and keeping them as it were self-sustaining and continuous, it will be necessary to learn how to make them at speed after a long sweep of the edge on which the turn is required to be skated, dwelling on the new

edge for a long curve also, until the impetus is exhausted, or nearly so. This is the way to acquire a steady balance after the turn is made.

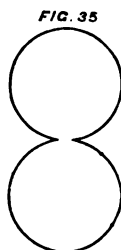
If the learner has carefully carried out all the foregoing practice, he may fairly be said to be thoroughly grounded in the elements of the art of skating. The perfection to which these elements can be extended, will be exemplified when they are used in the "club figures" as combined movements.

#### TWO TURNS, OR THE HALF-DOUBLE (Figs. 35, 36).

This is the first of these combinations. The old name of half-double gives perhaps a false idea of its nature; it is not the half of the well-known double 3, and it must not be confounded with it. When applied to the cross movements, it forms an alternating combination exceedingly curious and graceful, and by many preferred to the double 3 proper.

*Two Turns A.*—One turn from the inside forwards, which leaves the skater on the outside backwards, from which another turn is made, restoring him again to the inside forwards.

*Two Turns B.*—One from the inside backwards, which leaves the skater on the outside forwards, from which another turn is made, restoring him again to the inside backwards.



TWO TURNS OR  
HALF DOUBLE IN  
THE FORM OF  
AN 8.

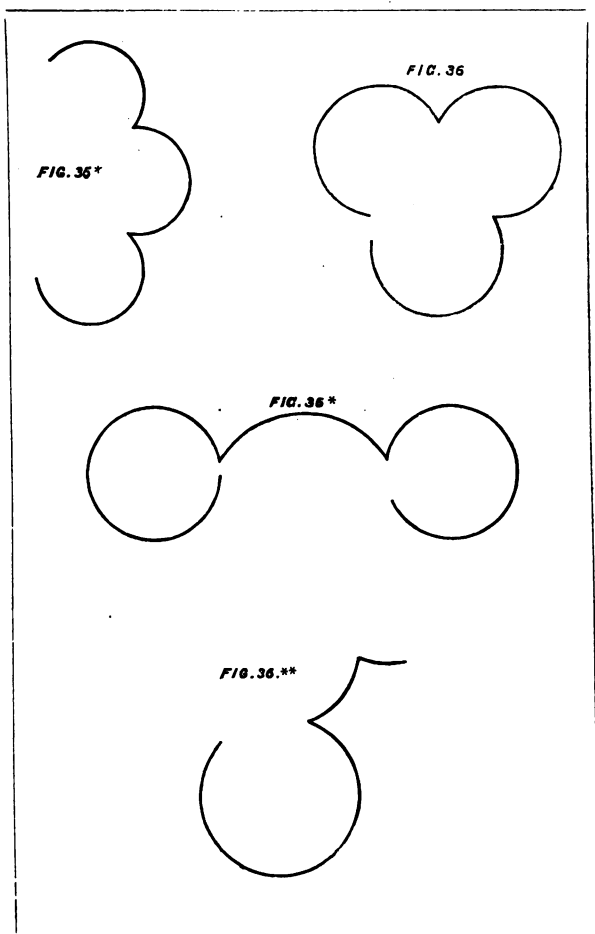


FIG. 35\*. TWO TURNS, OR HALF-DOUBLE.—FIGS. 36, 36\*, 36\*\* A FEW FORMS IT MAY EXHIBIT.

*Two Turns C.*—One from the outside forwards, which leaves him on the inside backwards, from which another turn is made, restoring him again to the outside forwards.

*Two Turns D.*—One from the outside backwards, which leaves him on the inside forwards, from which another turn is made, restoring him again to the outside backwards.

Observe, first, that by any of these two turns the skater is brought back to the original starting edge.

Secondly, that any odd number of turns changes the direction of going from forwards to backwards, or backwards to forwards.

Thirdly, that by any even number of turns, the original direction of going is preserved.

Fourthly, that plural turns are but the coupling of the respective single turns that apply to each other.

The skater must be particularly careful to learn the art of being steady, by making the curves between the turns large and equidistant, and dwelling very long on the edge after making the last turn. It is a common and bad fault with skaters to make an involuntary turn, from having indulged in the bad practice of starting off with a spin, the consequence of which is, that the turns are dwarfed; one curve will perhaps be only a few inches, and the other two yards.

The facilities which arise in skating for using

the cross impulse at once become apparent. The skater can combine it with such outside turns forwards and backwards as are suitable, and can easily ramble about the ice with an alternating action, without any fresh start but what naturally belongs to such turns when continued and sustained from the cross impulse. They make a really excellent and effective performance for the single skater, and one which every onlooker admires for its graceful singularity.

To take a smart run and do two Turns C, continuing on the outside edge steadily for a long and large curve, is another severe test of good skating.

We think that the fact of being able to imitate a figure 5 (Fig. 36\*\*) has never been observed. One of the writers found out in his practice years ago that two turns arranged properly will readily make it visible.

The next combination is

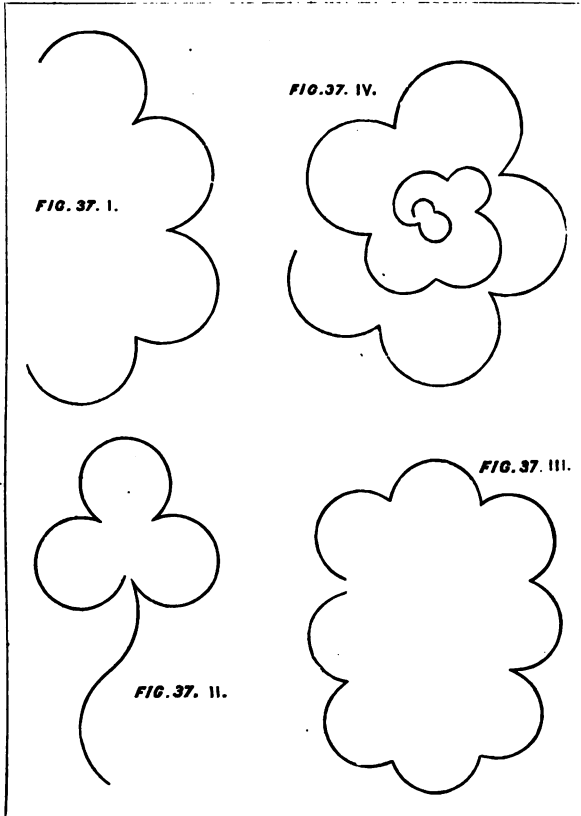
THE DOUBLE THREE, OR THREE TURNS (Figs.  
37 I. II. III. IV.),

which is effected by adding one more turn to the last figure.

The double being composed of three turns (an odd number), reverses the direction of the movement. If it be begun on a forward, it is consequently finished on a backward edge.

There are two ways of using the unemployed

leg in this figure. The first and old method is by swinging it in a peculiar manner forwards or



backwards, according to the direction of the turn that is being made ; and then when the change is

completed, gathering in the swing again. (It is vain to attempt to describe further an action which varies so in individuals.) It has a bold and fine effect when neatly done.

The other way is with the leg behind as usual, which method is more difficult, and to our views by far superior to the other, except, perhaps, in such a case as we shall presently describe. However, this is entirely a matter of taste.

To skate the double 3 to perfection, an immense amount of hard practice is necessary; it will not yield to a bungler. To make a few hurried spins, the whole of which can be surrounded by a child's hoop perhaps, and fancy we are doing the double 3, is a great delusion, and, as a rule, the performer who so makes them can only do them at a happy moment, and as often fails in his attempts as not.

The turns must come without apparent effort, and the curves or semicircles must be large and clean cut. The key to all this is undoubtedly a perfect study of separate single turns, without any curl or spin on to aid them, and the observance of great care in making forward turns on the toe and backward turns on the heel. The difficulties of the plural turns go on increasing with the size and velocity at which they may be attempted; at a high velocity, the centrifugal force being very great, they are only under the control of the best skaters. We have been induced to dwell much

upon the art of making doubles, on account of their supposed difficulty and the poor success that attends many skaters who try to learn them.\* They are not very difficult upon a small scale, but that they are so when very large is an undoubted fact, as the most expert skater will testify, and this arises from the necessity of attaining an upright position (for an instant) when the turn is made, and so losing during that instant the safety of the edge. Many skaters have but a faint idea of the scale on which this figure can, after a smart run, be skated. Curves of eight yards and upwards each, united by three turns, will be another great test-figure ; and the greater the velocity, the greater the test.

The double 3 can be skated into the form of a flower or shamrock, by making three nearly full circles between each of the turns, the last curve continued larger and longer to represent the stalk. This stalk can also be represented with the serpentine line.

The four kinds of three turns or double 3's may be described thus :—

*Three Turns A.*—Let the start be effected with a curve of inside forwards, then a turn to outside

\* That this figure may be executed with almost ridiculous ease and safety from long practice, I may state that I have often skated it from curiosity, with my eyes shut during its alternation, on each leg, without a fall, and I lay no claim to superior skill in it. The effect is curious ; it may be expressed, perhaps, by the word “dreamy.”—H. E. V.

backwards, another turn to inside forwards, and a final one to outside backwards, dwelling on each curve equally.

*Three Turns B.*—Let the start be effected with a curve of inside backwards, then a turn to outside forwards, another turn to inside backwards, and a final one to outside forwards, dwelling on each curve equally.

*Three Turns C.*—Let the start be effected with a curve of outside forwards, then a turn to inside backwards, another turn to outside forwards, and a final one to inside backwards, dwelling on each curve equally.

*Three Turns D.*—Let the start be effected with a curve of outside backwards, then a turn to inside forwards, another turn to outside backwards, and a final one to inside forwards.

#### FOUR TURNS AND UPWARDS.

Four turns, six turns, &c. being even numbers, bring the skater to the original starting edge; we have already mentioned the facilities of using the cross impulse and alternating such turns.

Five turns will make a triple 3, seven turns a quadruple 3, called also a double-double.

As to the number of turns that can be skated, exceeding these, all will depend upon steadiness and preservation of the first impulse as much as possible, by the lightness of the execution, and the

antifriction qualities that can be made use of by a careful attention to the application of the vertical and horizontal momentum, as discussed in the General Directions, and finally by the size of the curves or semicircles. We have heard of over a score turns] being done on one foot consecutively; we know not whether they were mere spins, but we can safely assert that we have skated with the best skaters in England, and have never seen anything like such a performance. Our own capabilities have never, so far as we remember, produced more than fourteen turns on the right, and twelve on the left foot. From the closest observation and experience, we believe that ten turns on each foot, the curves being of a large size, will almost exhaust the impetus, no matter what it may have been at starting; if more turns can be done, they will gradually degenerate into spins. No skater need fear for his reputation if he can execute a large triple or double-double, extending over a total space of twelve yards or upwards. It is in a wild yet graceful flourish of this kind that the unemployed leg is often swung to the front, gathered in, swung again, &c., according to the taste of the skater. The quieter and more elegant way, however, to our notions, is to keep it behind all the time, particularly if this can be done without presenting an appearance of stiffness.

It becomes obvious that if we chose by way of

private practice to do so, we can imitate more or less perfectly a few flowers, such as a rose, &c., by skating a number of turns into a spiral form. A pure kind of waltzing is also practical by alternating such turns in a large circle. This is very different from the usual scramble, dignified with the name of waltz.

## CHAPTER IX.

### THE SKATING CLUB FIGURES.

IF the learner has carefully studied the foregoing figures in their entirety, and acquired the art of skating them by practice, he will be quite competent to begin practising combined skating in concert with others.

The Turn C (the ordinary figure 3) can be done by two or four skaters standing opposite; so also can the double odd turns.

The figure 8 can be likewise so treated. We do not dwell much, however, on these individual movements, because by far the best arrangement of combinations has been gradually condensed into a series of figures, that have been called a reel or quadrille, but which we shall now designate (as indicating the source from which they have emanated) "the Skating Club Figures."

These can be participated in by any number of skaters not less than two or more than seven. Four is the best general number, perhaps, but one of the writers once had the good fortune to form

one of a party of six, and the whole of the ordinary movements were carried out without a single hitch, showing that six is a practical number.

All who take part must not only be good skaters, but equally matched in ability as to power and the great art of control. The beauty of the figure consists in a series of different movements performed with great accuracy and absence of confusion, requiring therefore all the very highest qualities of good skating. One of the number must be selected as captain or leader, and it is his duty to call out in a clear voice, on passing the centre, the movement he requires to be done; therefore the first requisite is a complete knowledge of the technical names, and what they imply. This may be readily learnt by tracing the lines on paper from the descriptions and diagrams.

To commence a figure the skaters stand opposite each other, as on the sides of a square. The first pair start together, and the second pair directly afterwards, all doing the same movements, the object of this retarded start by the second pair being to avoid collision by allowing the first pair to get clear of the centre before the second pair arrive there.

Should three, five, or seven skate, the odd man "cuts in" after all the others have started; this requires good judgment, and is certainly a post of honour.

Should six skate, we recommend the arrange-

ment to be as a hexagon, the three pairs starting one after the other.

Seeing the delicacy required in these figures, it is better not to attempt them in windy weather : first, because it is impossible to keep them accurate ; and secondly, by continual and fruitless efforts to do so, the skaters get disconcerted, and fancy they are skating badly, when perhaps in reality the contrary is the case.

Before commencing it is necessary to make a central starting-point, which is best done by putting down a handful of loose snow or ice cuttings, if the ice is clear ; but if slightly covered with rime or snow, rubbing away a place the size of a hat will be found the best plan.

It is the practice to begin with the right foot from a start or stroke from the left. In the figures illustrating the combined movements, the diagrams formed by two skaters, both starting with the right foot, are shown ; the thin lines denote the diagram made by the man facing north, the dotted lines by the man facing south. By adopting these different lines, it is hoped the reader will be able to follow out the evolutions of each skater.

The following lists in a first and second series comprise the chief standard figures of the Skating Club, and their variations. A third series will be given in Chapter XI.

## FIRST SERIES : STANDARD FIGURES.

Threes C. (Fig. 38.)

Once back. (Fig. 39.)

Twice back.

Three times back.

Once back and meet. (Fig. 40.)

Twice back and meet.

Three times back and meet.

Once back entire. (Fig. 41.)

Twice back entire.

Three times back entire.

Once back and forwards. (Fig. 42.)

Twice back and forwards.

Three times back and forwards.

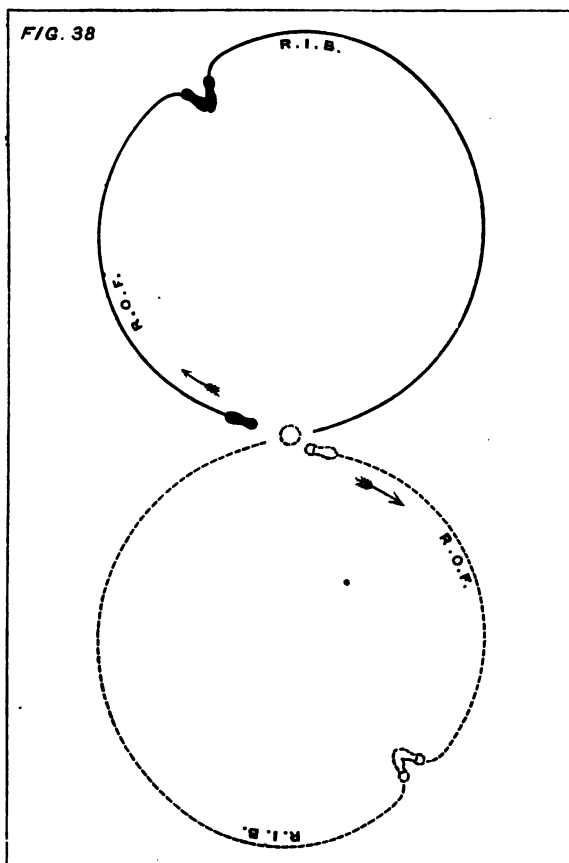
Forward 8's.

Forward 8's twice.

Back 8's.

Back 8's twice.

In attempting the following figures, it must be borne in mind that each figure has to be executed alternately on one and the other foot : consequently in doing any movement with the right foot, the skaters must at the commencement of the movement pass each other right shoulder to right shoulder, and if, on returning to the centre, they are left shoulder to left shoulder, the figure can be at once repeated on the left leg ; but if on returning to the centre the skaters find themselves right shoulder to right shoulder (as in the back entire),



THREES.

a three C must be skated on the right, before the movement can be repeated on the left leg.

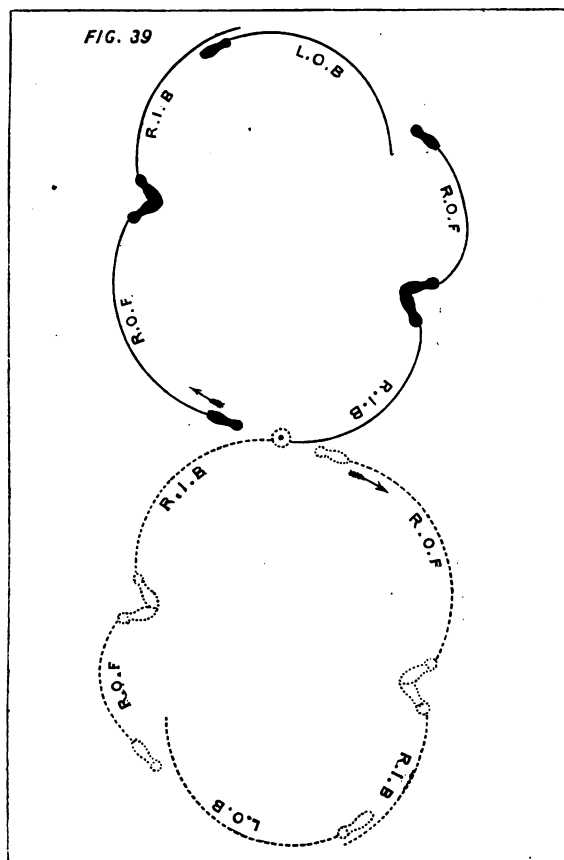
## EXPLANATION OF FIRST SERIES.

*Threes* (Fig. 38).—The leader calls “Threes” (that designated C being the one always used), upon which the first pair (of which he himself forms one), being opposite each other, start together on the right foot, each passing by the other’s right shoulder, and each making the turn, and coming by a long run on the tail of the three, into the other’s original starting-place. By repeating the movement on the left foot, each skater is brought to the spot from which he originally started. The second pair of skaters being at right angles to the first pair, have of course followed the actions of the first at a well-judged interval, so as just to avoid collision.

*Once back* (Fig. 39).—This is commenced by a 3 on right, then the left foot down for outside back for some distance, then another 3 on right, which brings each skater to the original starting-place of the other. By repeating the same on the left, each skater is brought to the spot from which he originally started.

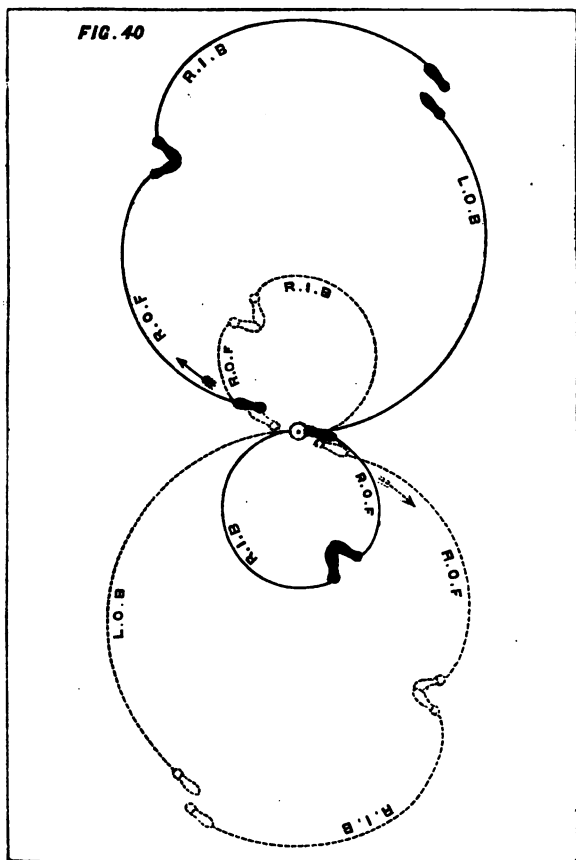
*Twice back*.—This is commenced, as in once back, by a 3 on right, outside back on left, again 3 on right, outside back on left, finishing with a 3 on right, to bring each of the skaters to the original starting-place of the other. This repeated on the left brings them to their original fronting.

*Three times back*.—This is done as the last, with



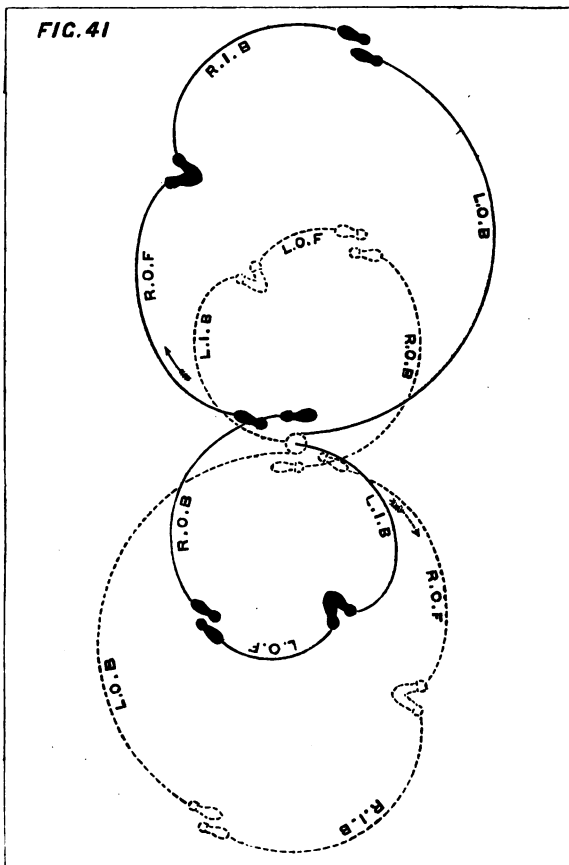
ONCE BACK.

the addition of one more 3 and outside back before the final 3 home, &c.



BACK AND MEET.

*Back and meet* (Fig. 40).—This is commenced by a 3 on right, outside back on left, continuing that



ONCE BACK ENTIRE.

edge on to the centre, where the skaters meet each other back to back ; and when nearly touching, a 3 on right is skated, which clears each to the

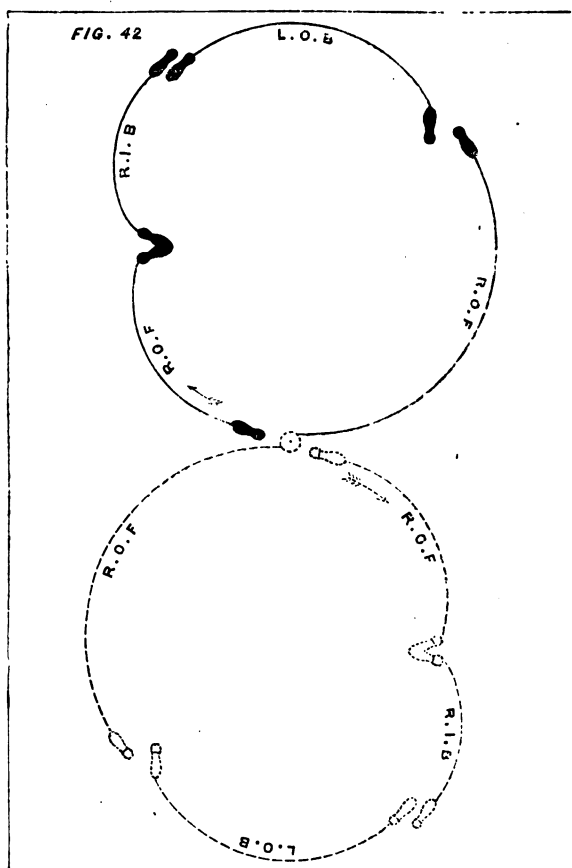
original starting-place of the other. By repeating this on the left each skater is brought to the place he originally started from.

Twice back and meet, and Three times back and meet, are extensions of the figure on the same plan as detailed above; viz. putting in two or three 3's before the final run into the centre.

*Once back entire* (Fig. 41).—This is commenced by a 3 on right outside back on left, continuing that edge on to the centre, where the skaters meet each other back to back, and when nearly touching the right, is placed behind the left leg, and a stroke from the cross effected, which throws the skaters on the outside back of the right leg. On this edge they continue for some yards, when a turn on the left leg brings each skater to his own original starting-place, but right shoulder to right shoulder. As we have before explained, in order to repeat the movement on the left leg, each skater should be left shoulder to left shoulder, and to effect this a single turn becomes necessary.

Twice back entire and Three times back entire will easily be understood.

*Once back and forwards* (Fig. 42).—This is commenced by a 3 on right, outside back on left, outside forwards on right, on which edge each skater runs into the original starting-place of the other at the centre, and being left shoulder to left shoulder, they are in a position to at once repeat the movement on the left foot.



ONCE BACK AND FORWARDS.

Twice back and forwards and Three times back and forwards will easily be understood.

*Forward 8's.*—These will be done when on the outside forwards of the last figure struck as usual, or from the cross, which latter we prefer.

Forward 8's twice will of course mean the 8 itself done twice continuously, without a break in the above movement.

Back 8's will be taken up from the back entire, therefore from the cross impulse.

Back 8's twice will mean the 8 itself done twice over, after such a movement.

To skate the Club figures properly, each skater should be so well up in the figures that he can obey almost mechanically the word of command. One frequently sees the figure spoiled by some man suddenly stopping and saying, "Oh! I beg pardon, I thought you meant so and so." Again, it is very essential that the same words of command be universally adopted, so that strangers meeting on the ice may be enabled to skate in combination.

The skater who has arrived at the pitch of doing all the figures described in Chapters VI. VII. and VIII. as isolated figures, has yet to practise assiduously before he can take his part with credit, in a combined movement. If he should have the misfortune to be without a companion with whom to skate the Club figures, he can still qualify himself by making a centre, and going through the figures by himself and "dummy." It is splendid practice in making the skater skate true to a point.

There are two golden rules to be observed in combined skating: First—Always strike boldly away from the centre at the beginning of a figure; secondly—Always make the curves sufficiently large.

The great mistake that is almost invariably made, arises from not putting in practice the first golden rule. If this is attended to the skaters find themselves exactly opposite each other at the end of the movement, and ready to do the same thing with the left leg. Care, therefore, must be taken by each skater, in commencing the figure, to make the outside forward with the right leg, which begins the 3 well to his left, and nearly as large as the subsequent curve on the inside backwards. Unless the skaters, after passing each other at the centre for the commencement of the figure, right shoulder to right shoulder, then get well to the right, they will find that they don't come back to the centre, as they should do, each in the other's place, and fronting. For instance, suppose a man about to commence a figure faces north, unless his first curve on the outside is well to his left, he will at the end of the 3 find himself facing, not south, as he ought to be, but west, and consequently (if four should be skating the figure) in the place of the second pair of skaters. Another most essential point to be remembered is, that the skaters should always watch each other's movements, looking each other in the face, as fencers or boxers do. This enables each to adapt himself to the other.

The most difficult figures are the back entire and back 8's. The back and meet is considered the easiest ; notwithstanding which fact, it is a very effective figure, capable of great development, as we shall see hereafter.

By varying the combination contained in the first series, and adding a few extra turns, we can make a second series equally pleasing, and more difficult.

#### THE SECOND SERIES : VARIATIONS, ETC.

One Turn C.

Two Turns C, half double. (Fig. 43.)

Three Turns C, double 3. (Fig. 44)

Twice back and one turn.

" " two turns.

" " three turns.

" " four turns.

" " five turns, triple 3.

" " six turns.

" " seven turns, double double.

Once back, meet, and two turns. (Fig. 45.)

Twice back, meet, and two turns.

" " three turns.

" " &c. &c. &c.

Twice back, meet, and forwards.

" " forward 8.

Once back, two turns, and three turns. (Fig. 46.)

Once back, double back entire. (Fig. 47.)

Twice " "

Once back, double back, and two turns.

Twice       "       "       "

Once back, double back, and double.

Twice       "       "       "

Once back, double back, and forwards.

Twice       "       "       "

Once back, double back and meet, and double.

Twice       "       "       "

&c. &c. &c.

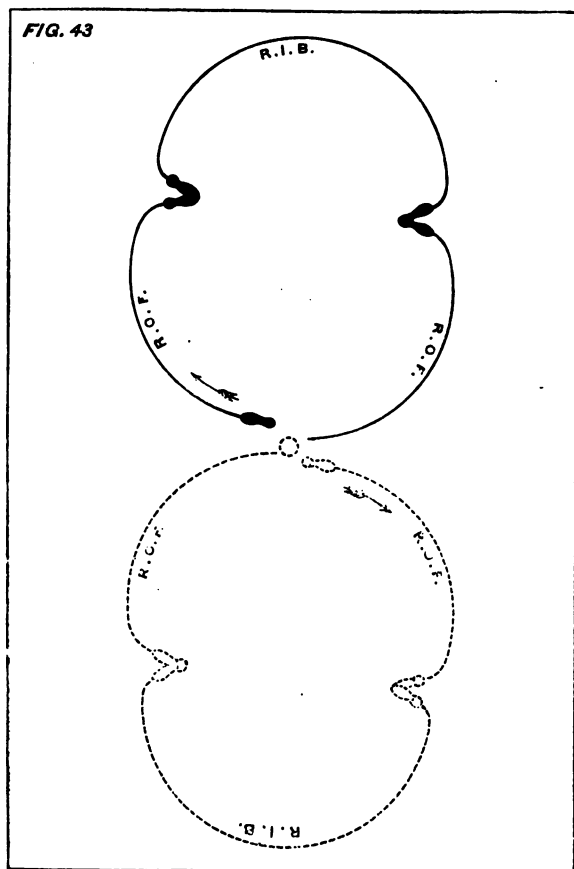
#### EXPLANATION OF THE SECOND SERIES.

*One Turn C*.—This is the well-known figure 3 with which the start is always effected, in order that the performers may themselves place in form—a sort of "proving the company" before going into action.

*Two Turns C* (Fig. 43).—After making one turn the resulting edge is dwelt upon for a yard or two, and then the second turn made, and the resulting edge of outside forwards continued for a few yards in a curve designed to bring each to the other's original starting position, as in the once back and forward.

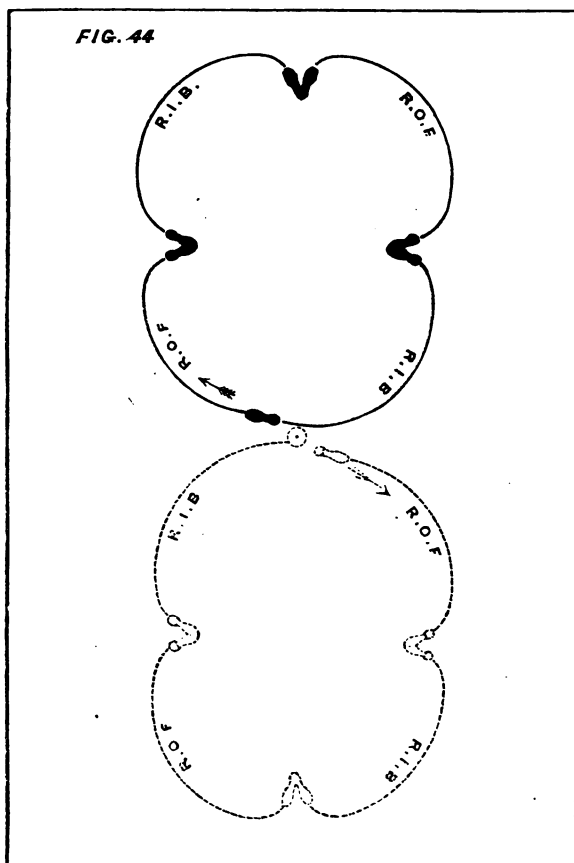
*Three Turns C* (Fig. 44).—This is carried out on the same plan. By the third turn the skaters are placed on the inside back, on which each runs home to the original starting-place of the other, on as large a curve as impetus will permit.

*Twice back and two turns, and other compound Turns*.—Having skated well out, with a once back,



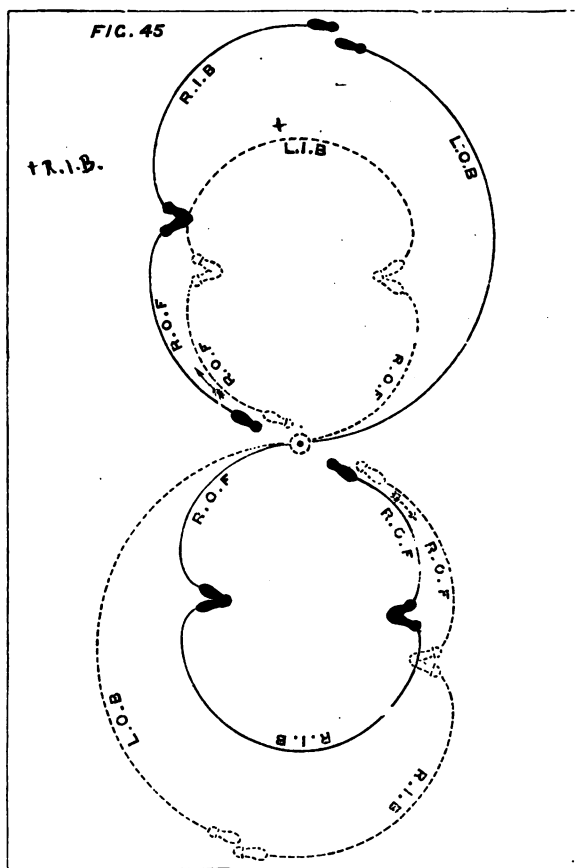
HALF DOUBLE. (Two Turns.)

they should draw in nearer the centre with the twice back, and get home, each to the original starting-



**DOUBLE. (Three Turns.)**

place of the other, on the last curve of outside forward, which has resulted from the second turn. On



ONCE BACK, MEET AND HALF DOUBLE, OR TWO TURNS.

this last curve they must be sure to dwell long,  
as that only is the test of perfection of balance,

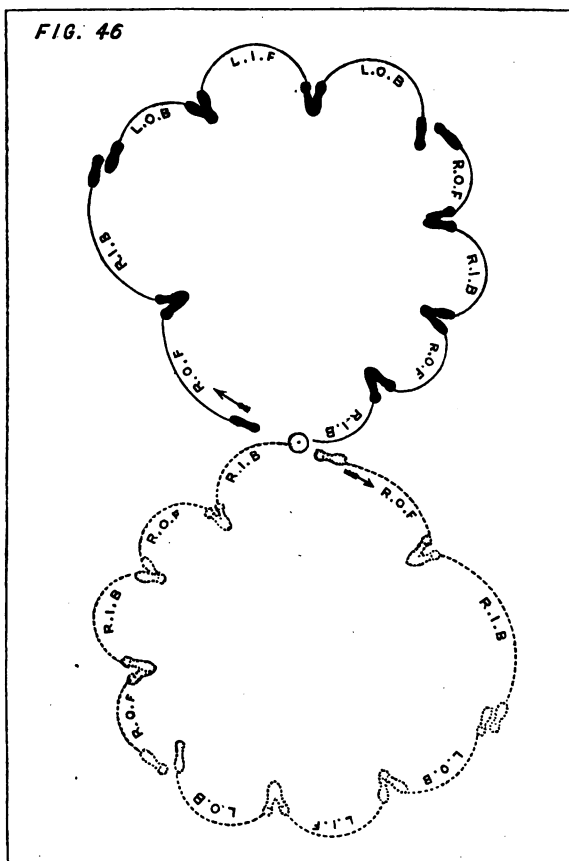
and it is in the steadiness and accuracy of the skaters after such trying evolutions that the true charm of the art is found.

*Once back, meet, and half double, or two turns, &c. &c.* (Fig. 45).—Here they run in on that capital and easy figure, the back and meet, and then put in some difficulties in the shape of the above two turns, running to the centre on the resulting curve of outside forwards. It may seem that this figure is nearly the same as the last, but in practice the meeting in the centre alters the direction of the curves, and causes a new exercise, requiring great self-control.

*Twice back, meet, and forwards.*—Here, directly the skaters meet back to back on the outside backwards of the left, they strike at once on to the outside forwards of the right foot, and carry out the forward 8 after the same fashion.

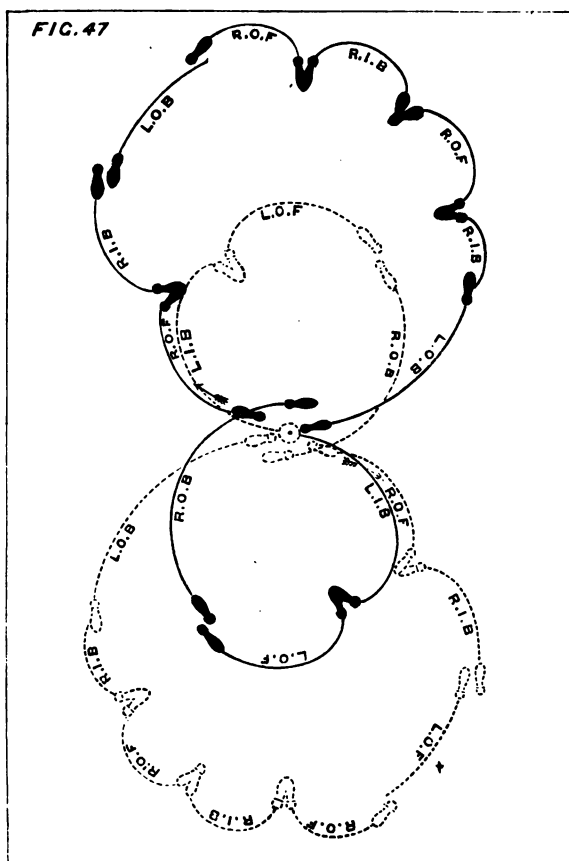
*Once back, two turns, and three turns* (Fig. 46).—After skating well out with the once back, two turns are put into the curve of outside back which is being described by the left foot, and this being done, the skaters are still on the outside back of the left foot. The right is then put down in the ordinary way of once back, and a double skated; the last turn leaves them on the inside backwards, and on this edge they run on to the centre, and repeat on the other foot.

*Once back, double back, entire* (Fig. 47).—After doing once back, a double 3 on right is skated,



ONCE BACK, TWO TURNS, AND THREE TURNS.

which leaves the skaters on the inside back of right, when the outside back on left is taken



ONCE BACK, DOUBLE BACK, ENTIRE.

up, and then from it the usual back entire is skated,

Once back, double back, and two turns, and Once back, double back, and double, will be quite apparent to the reader after the above descriptions.

*Once back, double back, and forwards.*—This also wants no further explanation.

Once back, double back, and meet, and double or any compound turns as a termination, will readily be understood.

The art of skating the combined figures to perfection can only be accomplished after considerable practice with the same companions, following the well-known law of all concerted art movements.

It ought to consist of large curves, executed with power and grace, combined with perfect steadiness of balance, power of control, quick perception, and judgment of distance; the motive power of the stroke should be disguised and kept silent, though powerful, so that the mere change of movement appears to effect it.

When such excellent qualities are concentrated upon these combined figures, the result is truly agreeable, not only to the immediate participators in them, but also to the onlookers, who seem never tired of watching the skaters, now receding far from the centre, now approaching it, now apparently sweeping backwards towards inevitable collision, yet avoiding it within an inch without hurry or confusion, now apparently entangled in whirling turns, yet all is order—the weaving of the pattern goes on.

There is an adverse side of the picture : of too crowded ice and good skaters, who left to themselves would rarely fall, knocked down half-a-dozen times a day, perhaps placed *hors de combat* for the season, by the ignorant and unskilful, and many a ludicrous scene is caused by a little mistake ; for instance, when one of the writers once took part in a figure, consisting of five skaters, the figure being the back entire. At the critical moment the first pair came into collision and fell, and the others following quickly upon them, all went down together !

A very large proportion of skaters are so delighted with an attainment of the usual figures, that they leave quite unexplored other fine and very difficult parts of the art. We trust, however, to find very many skaters disposed to make a pleasing and practical trip into its more recondite mysteries, and by the study of these pages to follow them out to the end.

## CHAPTER X.

### LOOPS AND Q'S.

IN almost all the following movements, the inside edge, forwards and backwards, comes in for its equal proportion of work, with the outside, and we again refer our readers to the remarks upon it, in the earlier part of this work; for, without these have been properly learnt, it will be quite useless to attempt carrying out with any satisfaction the evolutions treated of in this chapter.

The amazing quantity of fresh practice that arises from the introduction of the inside edge, will astonish those who fancied that they had already mastered the art of skating. It is different, however, with those who have attempted to penetrate beyond the usual limit, and practically to unravel, as we have tried to do, to the extent of our abilities, everything that is possible to be done on skates. We cannot understand how any skater can conscientiously deem himself worthy to rank as an M.A. of his art, unless he can go very deeply indeed into the intricacies of steady balancing on one foot, introducing at the same time in a long movement various turns and changes of edge, by alteration of inclina-

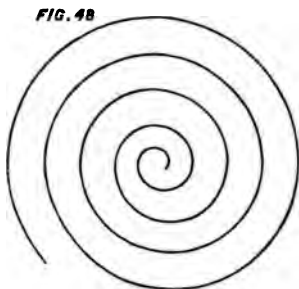
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tion, the development of which will require the greatest care in economising his original impulse. Great perseverance is necessary before some of these new combinations, which are excessively difficult, can be mastered.

The first figure we must direct the reader's attention to, is

#### THE LARGE LOOP.

This being done entirely on one edge throughout, requires some medium degree of speed. It consists of a portion of a large curve of the spiral, or it may contain (if the skater so pleases) one or two entire coils of it. The peculiarity of the spiral curve is well known as that of a curve whose radius is gradually and constantly diminishing (Fig. 48). Now, at the intended moment of making the desired loop, this diminishing radius must be arrested, and altered gradually and constantly into one that will extend the circumference of the curve, and bring the skater out of the influence of the spiral; by so doing his skate will thereby form a loop, known as the *epicloydal* curve (Fig. 49).



We have already, in the instructions for learning the serpentine line, dwelt upon the principles in-

volved in enlarging or diminishing curves, and this particular figure is of a like nature. Let the reader watch the movements of a spinning top; when nearly down he will find the peg describe on a very small scale this curious loop, and he will be able to apply the lesson to his own actions.

FIG. 49.

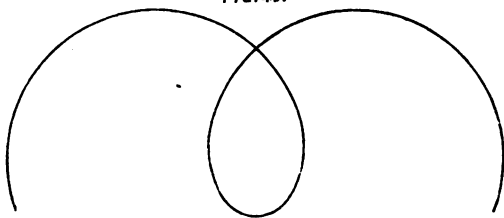
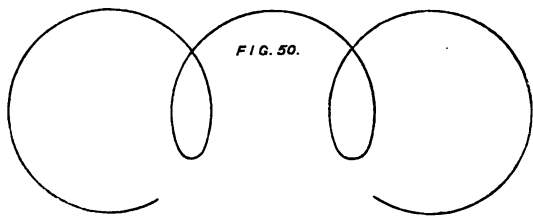


FIG. 50.



This figure is very fine practice, as long as it is kept large enough to enable us to preserve our usual neat attitude.

It can be done, of course, from all the four edges, A, B, C, D; and, if the impetus of the performer allows it, another large loop may be added, making a double figure, as Fig. 50.

It follows necessarily from a consideration of these diagrams, that a still finer piece of practice will be attained, if the first impulse can be carefully

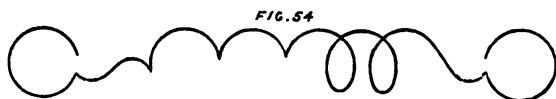
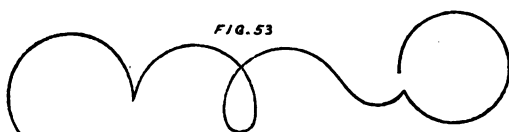
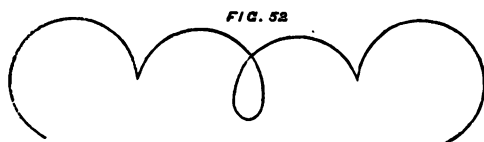
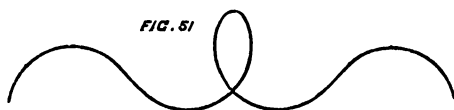


FIG. 51.—THE SERPENTINE AND THE LOOP.

FIG. 52.—THE TURN AND THE LOOP.

FIG. 53.—THE TURN, THE LOOP, AND THE Q.

FIG. 54.—DOUBLE Q'S, DOUBLE TURNS, AND DOUBLE LOOPS.

economised, and an opposing curve (of the nature of the serpentine line, which we have already studied) introduced, keeping the figure at the

same time large. (See Fig. 51 for the single figure, and Fig. 52 for the double turn and the loop. Figs. 53 and 54 are figures that will test the skater's powers.)\*

We have already dwelt upon the necessity of the loop being kept strictly to its name—large. When from its smallness so much exertion must be used in doing it that a graceful attitude can no longer be maintained, it must be placed with the small loop described in the last chapter of curiosities.

But if it can be skated large, we may hope some day, perhaps, to see it introduced into combined skating.

The figure which next comes under our notice, and from which germ a prodigious amount of fine and difficult practice springs up, is that known as the Q figure, because the marks left by the skate (when properly directed, as may be easily seen by tracing the lines on paper) give a tolerable representation of the printed letter Q, and is thus a combination of a turn and a serpentine line. One of the writers first saw the Q figure skated by a working man on a pond at Blackheath, some twenty years ago, and was at once so struck with its merits, that he lost no time in setting to work to acquire it. Soon after he met

\* With regard to Fig. 54, it is more an ideal figure than anything else. It is certainly *possible* to skate it, but as it embraces almost every difficulty that exists in skating, it is hardly *probable* that many of our readers will succeed in accomplishing it.

a friend who had picked it up in a similar manner, at Norwich, and who was quite surprised that the writer should not only know it theoretically, but skate it practically. He afterwards saw it figured some fifteen years after in Cyclos' first edition of the "Art of Skating," and from farther inquiry he found that it was actually a very old figure, but one very little known to skaters about the time alluded to. It need not be said that the writer took, with others, an active part in its resuscitation and re-introduction, and it has deservedly become an established favourite with skaters of the modern school.

Strange to say, the knowledge of the particular Q above-mentioned and no other was possessed for several years; until by his own practical researches into the art, one of the writers caused the introduction of seven others. Q D and reverse Q C may be picked out as samples of this new kind of difficult skating; by taking advantage of the different properties of an odd or even number of turns (when more than one turn is used), as well as by no longer preserving the exact form of the Q, and by still further dovetailing it into our old practice, the variety of changes is, to the uninitiated, almost incredible.

The Q figure is extremely simple; it is nothing more than an opposite curve, placed before or after a turn. The curve placed before the turn, gives four varieties, as does also the curve placed after the turn. Simple as the addition is, it is no trifle

in practice. Such a one as Q A, containing the most difficult of the turns, viz. B, will tax our very best powers.

Now it is absolutely necessary, in order to give a lucid explanation of these figures, to adopt a short and simple descriptive formula, which we do thus—

Q A.

Q B.

Q C.

Q D.

Reverse Q A.

Reverse Q B.

Reverse Q C.

Reverse Q D.

Each of which should be done entirely on either foot, without help from the other.

#### DESCRIPTION OF THE Q'S.

Q A (Fig. 55).—Let a curve of inside forwards be described, and, when some distance has been traversed, a change of edge is effected by leaning over to outside forwards, on which Turn C is made, and the resulting curve of inside backwards continued until the circle or body of the Q is complete.

Q B (Fig. 56) is begun with a curve of inside backwards, and, when some distance has been traversed, a change of edge is effected, by leaning over to outside backwards, on which Turn D is made, and the resulting curve of inside forwards con-

tinued until the circle or body of the Q is complete.

Q C (Fig. 57) is begun with a curve of outside forwards, and, when some distance has been traversed, a change of edge is effected, by leaning

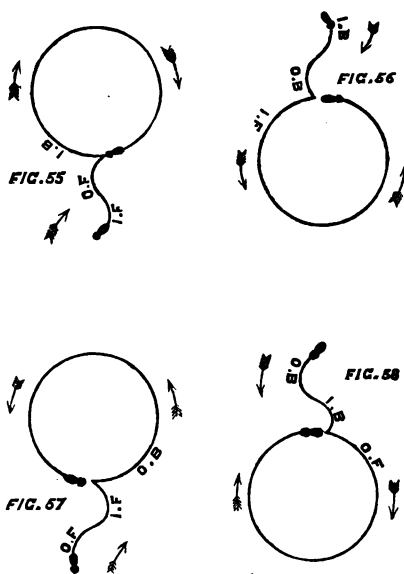


FIG. 55.—Q A. FIG. 56.—Q B. FIG. 57.—Q C. FIG. 58.—Q D. (All drawn for the Right Foot.)

over to inside forwards, on which single Turn A is made, and the resulting curve of outside backwards continued until the circle or body of the Q is complete.

Q D (Fig. 58) is begun with a curve of out-



Reverse Q B (Fig. 60) is begun by describing a whole circle of inside backwards, when Turn B is immediately made, and the resulting curve of outside forwards continued for a short distance; the change of edge is then effected by leaning over to inside forwards, which completes the figure.

Reverse Q C (Fig. 61) is begun by describing a whole circle of outside forwards, when Turn C is immediately made, and the resulting curve of inside backwards continued for a short distance. The change of edge is then effected by leaning over to outside backwards, which completes the figure.

Reverse Q D (Fig. 62) is begun by describing a whole circle of outside backwards, when Turn D is immediately made, and the resulting curve of inside forwards continued for a short distance. The change of edge is then effected by leaning over to outside forwards, which completes the figure.

If the reader has properly studied the serpentine line, he will find no difficulty in changing the edge: when adding on the turn, he may perhaps require, in his early efforts, the assistance of a gentle swing of the unemployed leg; but when he is more advanced, this friendly swing must be discarded in favour of a proper use of the change of position the body will undergo. This will, from careful practice, come naturally, although slowly.

On the termination of any of these eight Q figures, the skater remains on an edge alike in character to the one he started upon, but his direction

of going is reversed. Thus, taking the Q A for an example of all, we find that he starts on the inside forwards, changes the edge by inclination of the body to the opposite side (outside forwards), on which, after making the Turn C, he is restored to the inside edge, but in a backward direction.

#### THE Q ALTERED IN FORM.

The skilful skater does not care for keeping to arbitrary imitations of particular figures, unless there is some real object or apparent advantage to be gained in so doing. The forms of particular figures are most useful in the way of giving the young skater something to practise at—something to achieve—which may tend to lead him on to still further improvement. Under this category may be classed the alteration of shape we now propose for the Q (Figs. 63 and 64). The alteration consists in simply leaving out three-quarters of the body of the Q, and making the changes of edge equidistant, *i.e.* the duration of the curves equal. We shall thus be prepared to join together, and otherwise vary, these eight Q's, forming them into double Q's thus :—

First double Q A will be formed by the junction of Q A and Q B.

Second double Q B will be formed by the junction of Q B and Q A.

Third double Q C will be formed by the junction of Q C and Q D.

Fourth double Q D will be formed by the junction of Q D and Q C.

Fifth double Q will be formed by the junction of reverse Q A and reverse Q B.

Sixth double Q will be formed by the junction of reverse Q B and reverse Q A.

FIG. 63.



FIG. 64.



FIG. 65.



FIG. 63.—THE Q, ALTERED INTO EQUAL CURVES.

FIG. 64.—THE REVERSE Q, ALTERED INTO EQUAL CURVES.

FIG. 65.—THE Q'S DOUBLED.

Seventh double Q will be formed by the junction of reverse Q C and reverse Q D.

Eighth double Q will be formed by the junction of reverse Q D and reverse Q C.

In each of these, the skater is brought back to his original starting edge. Thus, taking the first

double Q A for an example, we find that he starts on the inside forwards, effects the change of edge by inclination of the body to the opposite side (to the outside forwards), on which, after making the Turn C, he is deposited on the inside backwards; he now again effects the change of edge by inclination of the body to the opposite side,—*i.e.* to outside backwards,—on which, making the Turn D, he is restored to the inside forward, his original starting edge.

Alterations of edges by opposite inclination, and alterations of edges by turns with the same inclination of body, are the combined features of these beautiful figures.

Among the many novel marks left on the ice by the skater, as he practises these single Q's, we may notice the exact form of the "bracket" used in writing (Fig. 65), and we have found that we could skate the double Q's into a figure which, as being a good test of ability, is, perhaps, worthy of being preserved, and christened

#### THE SPECTACLES.

There are necessarily four ways of doing the figure, all founded on the same principles, viz. the two sorts of Q's united in their unaltered state. One example will suffice. Reverse Q A and Q C, which may be detailed thus, and begun by describing a whole circle of inside forwards, when Turn A

is immediately made, and the resulting curve of outside back continued for a short distance; the change of edge is then effected by leaning over to inside backwards. Here the edge is again changed by leaning to outside backwards, on which Turn D is made, and the resulting curve of inside forwards continued until the circle is complete

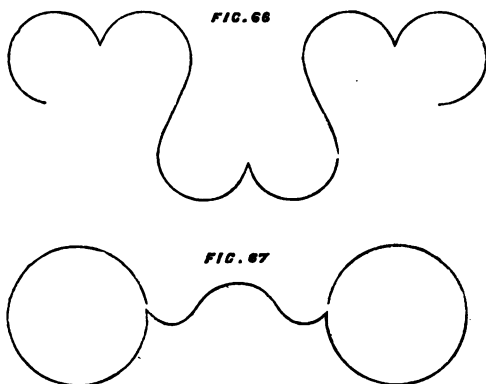


FIG. 66.—EXTENSION OF THE PRINCIPAL FORMS—ARABESQUE.  
FIG. 67.—THE Q AND THE REVERSE Q FORM SPECTACLES.

(Fig. 67). The result will be a tolerable representation of a pair of spectacles without the side springs; and this figure is useful as directing the attention of the skater to the combination of the two sorts of Q's, viz. those in which the body of the Q is made first and those in which it is made last. By skating the spectacles the four different

ways possible, viz. by starting from the reverse Q's, A B C and D respectively, the skater will absorb and interlink each time one of the others—Q A, B, C, and D, thus :

Reverse Q A and Q B	} All form the spectacles.
Reverse Q B and Q A	
Reverse Q C and Q D	
Reverse Q D and Q C	

Now, by reversing the order of these, as Q B and reverse Q A, for instance, we arrive at another beautiful variation of the Q's, viz. those with more turns than one.

From practice we have discovered a very simple rule to understand turns ; it is this: *odd turns* change the direction of going, *even turns* do not. Yet, in addition to this, we must farther simplify the descriptions of these ensuing figures, because it would certainly bewilder the learner had he to follow out all the many turn movements under separate heads, such as "two turns," "three turns," &c. : this then we do by dividing them into the two distinct classes—odd and even turns—and then our next list of changes will stand thus :

Q A three turns	} Representatives of the class "odd."
Q B           "	
Q C           "	
Q D           "	

Reverse Q A three turns	} Representatives of the class "odd."
Reverse Q B „	
Reverse Q C „	
Reverse Q D „	

The combination is simple. The double 3 (being composed of three turns) gets worked up into the figure, and, like all odd turns, changes the direction of going. The character of the edge is preserved, however, by the alteration of the inclination. One descriptive example will suffice.

Reverse Q A three turns is begun by describing a whole circle of inside forwards, from which a turn to outside backwards is made, another to inside forwards, and the third again to outside backwards, on which the skater continues for a little distance, when he effects the change of edge by leaning over to inside backwards.

The companion list of changes is :—

Q A two turns.	} Representatives of the class "even."
Q B „	
Q C „	
Q D „	
Reverse Q A two turns.	
Reverse Q B „	
Reverse Q C „	
Reverse Q D „	

The combination is also simple,—the half double or two turns gets worked up into the figure, and,

like all even turns, does not change the direction of going. The character of the edge is altered, however, by the alteration of the inclination. One example will suffice.

Q C two turns is begun by describing a curve of outside forwards; when the change of edge is effected by leaning over to inside forwards, on which one Turn A is made to outside backwards, which being continued for some little distance, the second turn to inside forwards finishes the figure.

We now arrive at a set of combinations beyond which it will not be necessary to go, as they may well be said to be exhaustive of this part of our subject. They are those in which, in a double Q, double or more turns are engrafted.

First double Q A, three turns in each (an example of the class "odd").

Second double Q B, three turns in each.

Third double Q C,       "       "

Fourth double Q D,       "       "

Fifth double reverse Q A, three turns in each.

Sixth double reverse Q B,       "       "

Seventh double reverse Q C,       "       "

Eighth double reverse Q D,       "       "

In this remarkable and difficult figure, consisting of two kinds of double threes and two kinds of serpentine lines, the skater is restored once more to the edge he originally started upon. One example will suffice.

*Second double Q B, three turns in each.*—It is begun by describing a curve of inside back, when the change of edge is effected by leaning over to outside back, from which three turns are made, the last of which will leave the skater on the inside forwards. Here the change of edge must be again effected, by leaning over to outside forwards, from which three turns are made, the last of which will leave the skater on the edge he originally started upon, viz. the inside backwards.

The last list consists of :—

First double Q A, two turns in each (an example of the class "even").

Second double Q B, two turns in each.

Third double Q C,           "           "

Fourth double Q D,           "           "

Fifth double reverse Q A, two turns in each.

Sixth double reverse Q B,           "           "

Seventh double reverse Q C,           "           "

Eighth double reverse Q D,           "           "

In this equally difficult figure, the skater curiously enough is also brought back to the original starting edge, as may be seen from the one example necessary.

*Fourth double Q D, two turns in each.*—It is begun by describing a curve of outside backwards, when the change of edge is effected by leaning over to inside backwards, from which two turns are made, the last of which will leave the skater

on the inside backwards. Here the change of edge must be again effected by leaning over to outside backwards, from which two turns are made, the last of which will leave the skater on the edge he originally started upon, viz. the outside backwards.

As we may expect, from our experience of the foregoing, it becomes practicable to describe on the ice, double imitative figures. As these are useful when regarded as practice, which tends to educate the feet, it is perhaps advisable to preserve them. We name the two sorts

THE UNITED SHAMROCK AND THE UNITED  
ROSES.

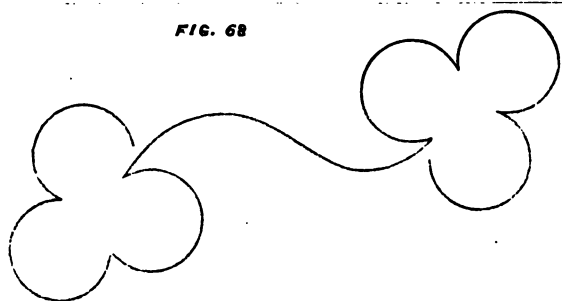
(Figs. 68, 69, and 70.)

We shall only describe the first in detail, as the second is easily done by adding more turns.

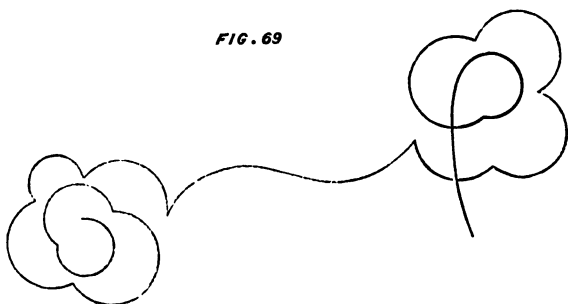
There are four ways of skating them, founded on the reverse Q's A, B, C, and D three turns, joined to the Q's A, B, C, and D. We will take the example from the reverse Q A three turns, and the Q B three turns.

This is begun by describing a curve of inside forwards, turning to outside backwards, again turning to inside forwards, and then again to outside backwards (at which period the junction forms one shamrock). Continuing on the last-mentioned edge for a yard or two, a change of edge must

**FIG. 68**



**FIG. 69**



**FIG. 70**

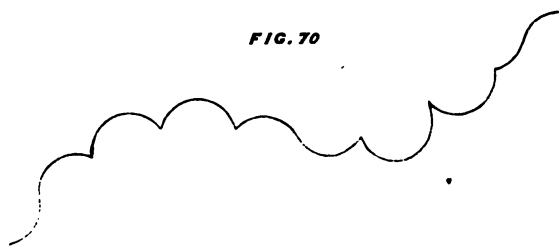


FIG. 68.—THE DOUBLE SHAMROCK. FIG. 69.—THE DOUBLE ROSES. FIG. 70.—SERPENTINE LINE AND SEVERAL TURNS. (All the figures being extensions of the Q principle.)

be effected by leaning over to inside backwards, on which edge the skater continues for another yard or two (thus forming a serpentine curved stalk); a turn is then made to outside forwards, another turn to inside backwards, and another to outside forwards, the junction of which forms the last shamrock : the figure being, in fact, two double threes, each of a different sort, altered to the form of a shamrock, and united by a serpentine curved line, the whole being done on one foot, and affording no less than eight changes.

The United Roses contain more turns in the spiral form, commenced and finished at the centre ; beyond this the principle of the figure is the same.

## CHAPTER XI.

### ALTERNATING MOVEMENTS.

WE shall now proceed to direct the reader's attention to a few little matters in connexion with our last lessons that require explanation.

The question may arise, whether sufficient impetus can be maintained to alternate some of these kind of Q's, and make them self-sustaining? We can reply in the affirmative. It becomes quite possible on good ice, and with due attention to the impulse and momentum, as described in the General Practical Directions, to alternate even double Q's; whilst from a very gentle start, six or more single Q's can be linked in series on one foot, without any fresh aid from the other. The size of Q's may be left to the capabilities of the skater, the aim being to skate them large, even if in doing so they should become fewer in number.

Can we make use of the cross impulse? Certainly, and at times it is most useful and convenient to make these well-known respective cross movements, either forwards or backwards, available; and this causes additional variety.

We have selected from our own practice two more original and difficult movements, by which the skater may test his powers of alternating movement under the disturbing influences of a series of changes, which, without due care, will most assuredly bring him to a standstill.

#### FIRST ALTERNATING MOVEMENT.

Turn C as a start on the left, reverse Q D on the right, which leaves the skater on the outside forwards, on which he makes Turn C, which leaves him on the inside back of the same foot (the right), and from which he must obtain sufficient impulse to repeat the movement on the left, and again on the right continuously.

#### SECOND ALTERNATING MOVEMENT.

Turn C as a start on the left, Q D on right foot, which leaves the skater on the outside forwards, on which he makes Turn C, which leaves him on the inside back of the same foot (the right), and from which he must obtain sufficient impulse to repeat the movement on the left, and again on the right continuously.

One of the writers\* having laboured for many years at the resuscitation of the serpentine line, and the development of the Q's simple and complex, it was long his earnest desire to see some of them,

\* H. E. Vandervell.

at any rate, introduced into combined skating, consisting, as they do, of beautiful ever-changing curves and turns, of pure feats of difficult and delicate balancing, carried out in a movement of comparatively long duration, requiring the greatest care, and the highest attainments of the skater; in fact, genuine high-class skating. Holding, as he does, with those who to elevate our art have wisely discountenanced and expunged from combined figure skating all mere tricks, he differed from those skaters who would wish to exclude these splendid movements, the ability to skate which, in concert with other skaters, is another step up the ladder of our art.

The reader is now quite competent to form an opinion whether, beautiful as he must acknowledge our first and second series of figures to be, they contain all that ought to be done on skates. •

Happily the opposition with which the new figures contained in our third series were met, is fast passing away. Many rising skaters have learnt them, and have assisted in introducing them into our club figures. We might have done more, but for the want of ice; when we get that, our next want will be a more open sphere than the London parks afford.

However, it is a great satisfaction to know that we have, according to the *Field*, done something to prevent the art of skating standing still, whilst all other arts and sciences have been advancing.

The following are the new movements alluded

to, and they can be inserted at pleasure amongst any of the old.

#### SKATING CLUB FIGURES, THIRD SERIES.

Once back, forward, out and in (Fig. 71).

Twice           "           "

Three times   "           "

Once back forward Q (Q C) (Fig. 72).

Twice           "           "

Three times   "           "

Once back, and with back out and in (Fig. 73).

Twice           "           "           "

Three times back, with back out and in.

Once back, with back Q (Q D).

Twice           "           "

Three times   "           "

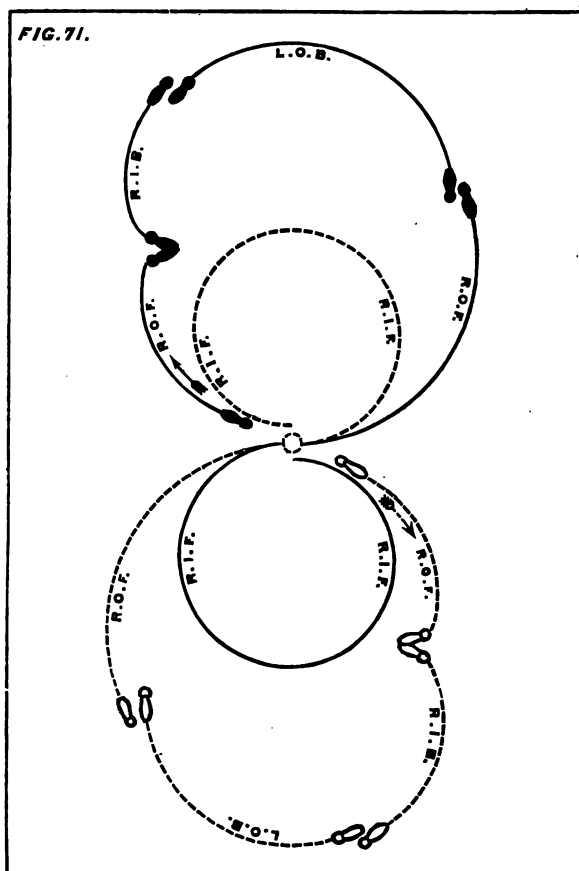
Once back entire, back one turn, two turns (Fig. 74), or three turns (Turn D).

Twice back entire, back one turn, two turns, or three turns (Turn D).

Three times back entire, back one turn, two turns, or three turns (Turn D).

#### EXPLANATION.

Once back, forward, out and in (Fig. 71), is begun by a Turn C on right, and so on to the outside back of left, and again on to outside forwards of right; on this edge the skaters approach each other, and when almost at the centre a change of edge is effected by altering the inclination to inside



ONCE BACK AND FORWARD, OUT AND IN.

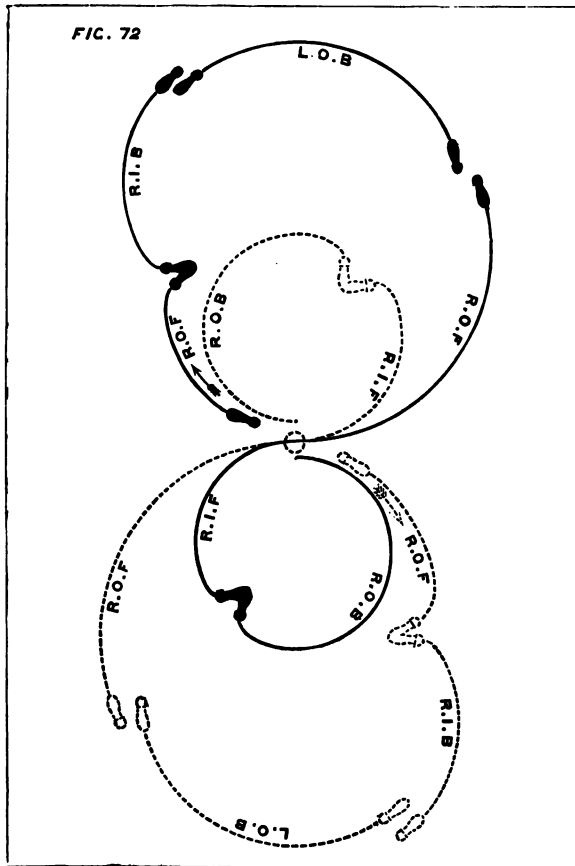
forwards (all on the same foot), on which, passing each other, they continue until they arrive home.

when they repeat on the left. Mr. Vandervell designed this figure to make use of the forward serpentine line, in combined skating. It is most difficult to execute, as the tendency to curl in after the change to the inside edge has been effected, is very great. It is amusing to see how men, really good skaters in many respects, are so easily pulled out of their course, and taught humility, by the despised inside edge forwards. The antidote to correct the curl is the sideways attitude, with the unemployed leg behind, and the toe turned out.

*Twice back forward, out and in ; Three times back forward, out and in.*—These are but extensions of the same figure.

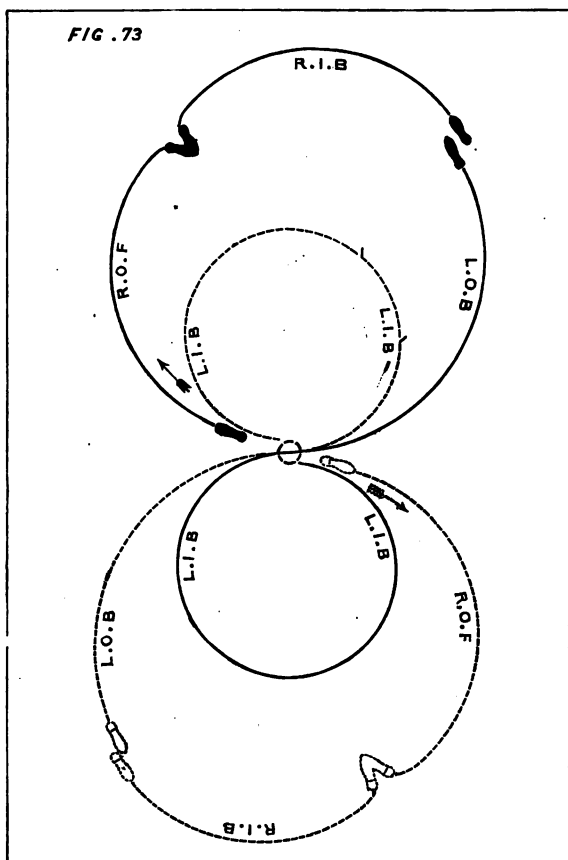
*Once back and forward Q (Q C) (Fig. 72).*—It is begun with a single Turn C on right, to outside back of left, and the old original Q figure (Q C in the list), from the outside forwards of right, the skaters making the turn when each has passed his companion, on the inside edge. They will then be on the outside back of right, on which they continue until the centre is gained ; but being here, right shoulder to right shoulder, a Turn C must be skated, before the figure can be repeated on the left, as usual.

This introduction of the old Q figure into combined skating is not quite so difficult as the former figure of out and in, in consequence of the skater not being required to stay so long on the inside forwards ; nevertheless, being obliged to make the



ONCE BACK AND FORWARD Q.

turn at a given point and time, is a nut to crack for many skaters who have been accustomed to do the Q just when the skates like.



ONCE BACK, WITH BACK OUT AND IN.

Twice back, &c. &c. Three times back, &c. &c.  
are but extensions of the same figure.

Once back, with back out and in (Fig. 73), is commenced with single Turn C on right, and so on to outside back of left, on which the skater runs into the centre, and meets his partner back to back; and, just previously to the apparently inevitable collision that must ensue, each effects a change of edge by leaning over to the inside back, all being done, of course, on the same foot; each will then pass his companion backwards, and recede in the most curious manner, face to face, and be gradually brought together again by the natural curve of the inside backwards, on which each skater still remains. As they are at the centre, right shoulder to right shoulder, a single Turn C is necessary, so that the figures may be repeated on the left leg.

This figure was introduced by one of the writers into combined skating, as an illustration of the serpentine line backwards, and we are happy to say that it has been very much admired, on account of the singular and beautiful effect the above described receding motion gives it. Although very difficult, it is not quite so much so as the forward out and in, as the inside backwards is a shade easier than that edge forwards. To guide oneself accurately backwards upon a changing edge, must call forth the highest qualities.

Twice back, &c. &c. Three times back, &c. &c. are but extensions of the same figure.

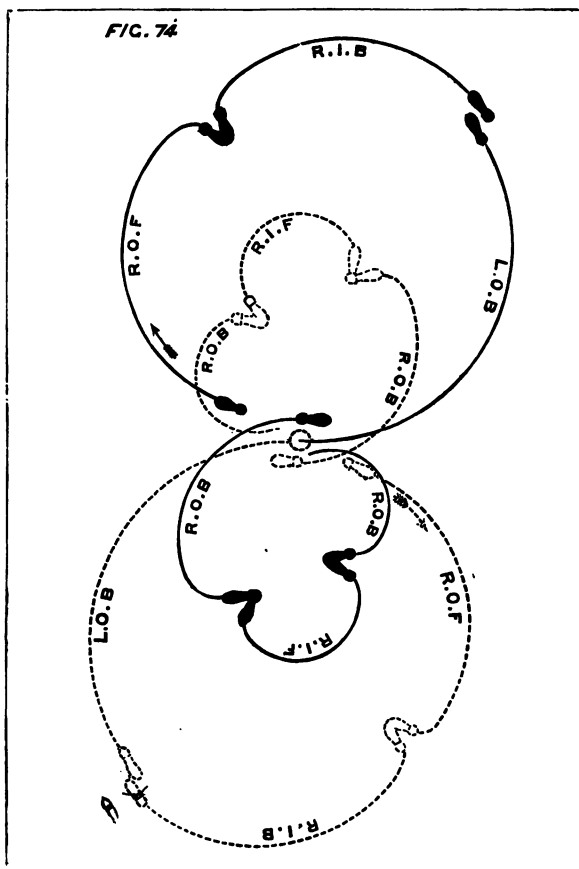
Once back, with back Q, is commenced by a

single Turn C on the right, and so on to outside back of left, continuing on this edge till the centre is gained, when a change of edge is effected by leaning over to the inside edge; and when the skaters have receded from each other some yards, the turn is made, bringing them on to the outside forwards, which is continued to the centre, and so, still being on the left foot and right shoulder to right shoulder, a Turn C becomes, as in all these cases, necessary.

This figure, which we introduced as an illustration of one of the seven new Q's, is by far the most difficult feat that has ever been attempted up to the present time, in combined movements.

Twice back and Three times back are but still more difficult extensions of the last figure. The increased difficulty is caused by the greater impulse that is required to execute the more numerous turns.

*Once back entire, back half double, &c. &c.* (Fig. 74).—This is begun by Turn C on right, and so on to the outside back of left, on which the skaters run in as is usual in the back entire; and when each has taken the cross stroke, they execute from it the back Turn D, and so come to the centre on the inside forwards, or (what is we think prettier) a half double can be done from the cross stroke, and the skaters then come to the centre on the outside back. This is what is illustrated in Fig. 74.



ONCE BACK ENTIRE, BACK HALF DOUBLE.

This figure was introduced by the writers, to make use of the pretty double back turn.

To combine these new movements with the old is very easy ; for instance, twice back, meet, and forward Q will suffice as an example.

With such a groundwork as the eight Q's, with their simple and compound turns of odd and even, there is a fine field for a new series of combined movements. Look, too, at the Turn B still unused ; at the reverse Q C with a single turn. What a finish it makes to a figure some of us know practically. The writers have, when skating together, succeeded in doing with some success *a double reverse Q C of three turns in each !* No doubt the next generation of skaters will pay more attention to these matters, and find out that there is something grander in skating than merely running up and down the ice. At present, our little circle of men who have gone more or less into this difficult part of skating may be counted on our fingers.

Continuing our researches into new combinations of, at present, isolated movements, we arrive at

#### THE LARGE LOOP, THE SERPENTINE LINE, AND THE TURN (OR Q) COMBINED.

This is quite possible and practical, although from want of ice and opportunity we have not skated it. When we consider that it can be very much varied, and that the loops and turns can be doubled, and that there are the four edges, A, B, C and D, as a foundation, it is apparent that we

shall not run short of practice. We give a sketch of a few as a guide to their nature. (See Figs. 51, 52, 53, 54.) Fig. 54, as before mentioned, is an ideal figure at present, though there is no reason why it should not be skated.

Here again is new material for combined skating. We get almost lost in the immensity of our art.

The next figure is, we believe, the sole invention of Mr. Vandervell. He will therefore describe its nature in his own words, and he calls it

#### THE ROCKING TURN.

“Following out a determined plan to pursue my practical researches into the art of skating to the end of all possible combinations, after having exhausted the Q, I began to consider the feasibility of making the change direct from the inside forwards to inside backwards and *vice versa*, and from the outside forwards to outside backwards and *vice versa*, by the employment of a kind of turn, for which, from its nature, I can find no more simple yet I hope expressive name than the ‘Rocking Turn.’ It has been said by some enthusiast that even ordinary skating is somewhat akin to flying; in this new turn we approach still nearer (by the power we gain of gliding off to the side and in a somewhat similar manner) to the gambols that are exhibited by the feathered tribe, whose marvellous power of darting about in all conceivable angles and curves, forwards, backwards, and sideways, must ever be a source of

profound admiration to the lover of natural history and philosophy. Another good illustration of the extraordinary turn, is furnished in the 'paying off' of a ship, that has just tacked to windward.

"This turn, as far as my individual experiences go, very far transcends in difficulty anything hitherto known to me, and I think it will be the case with most other skaters; and why is this? because we shall have to incorporate in a turn, an alteration of the inclination of the body sideways, for a curve in quite a different direction.

"It was about the year 1860-1861 that I first turned my attention to the subject, not from any suggestions of others, for at that time I had never heard it mentioned, either as a possible or impossible figure. The mere first thought of it is almost sufficient to place it in the category of things that, in the words of Lord Dundreary, 'no fellow can understand.' It is only after going very deeply into the matter, that I began to think that it might be considered as *possible*.

"The pioneer has always a host of little obstructions to clear away from the intended track, and, owing to the succession of mild winters in England, I have not been able to devote as much practice to this turn as I should have liked; so that whilst it must be considered still in embryo, nevertheless the path is now, as far as I can see, tolerably clear, and I hasten to place before my brother skaters this final addition to our *répertoire*

of movements, coming under the class of pure figure skating.

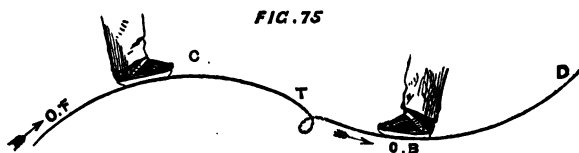
“To do this, however, properly, I must trespass, I fear, very much upon the patience of my reader, but yet I trust for his benefit, in handing over to him my entire experience of it in minute detail.

“In order to describe the principles upon which I founded this turn, I must refer him to page 96, where amongst the remarks upon turns we have said that whilst they change the edge and the direction of going, yet the inclination of the body sideways is not materially changed. In order therefore to preserve the same character of edge (which is the point we now wish to carry out) whilst altering the movements from forwards to backwards, or backwards to forwards, it at once appears imperative that an alteration of the inclination of the body sideways, to the opposite side, at the moment of making the turn or partial turn, which is to reverse the direction of going, must be made; and that if such an operation is practical and skilfully carried out, it must preserve the character of the edge on which the skater originally started. Thus, an outside forwards would be converted into an outside backwards, &c. &c. as in the following diagram, which represents the plan upon which I designed the movement. And here I may observe that it will materially assist the reader in thoroughly comprehending and attempting practically to carry out this change, if he do as I did, viz. bend two

pieces of wire into curves, and on each fasten, by a tight coil or two round it, other short pieces of straight wire standing up, and capable by means of the friction of the coils, of being more or less inclined sideways, to represent the skater. This easily made little model is the best instruction I can give him. He will be able to place the curves and mimic skaters in every gradation of position, and will be able to see plainly how very curious, novel, and delicate must be his operations for a re-adjustment of inclination and attitude. The difficulties are so great that I cannot imagine any but skilful skaters have a chance of doing this figure, and they from the foregoing and following hints will know how to set about it properly.

#### FIRST DESIGN OF THE ROCKING TURN.

"C is supposed to represent a skater describing an outside forward curve in the direction of the arrow, interposing a turn at T, and at the same



time altering the inclination of his body sideways, as shown more plainly by the dotted lines in Fig. 76, and the result will be as depicted ; he will be

left upon D, the outside backwards, the same character of edge (outside) upon which he started, but reversed as to direction.

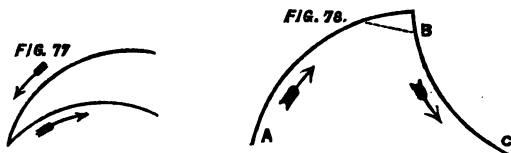
“When I commenced to try and work out in practice this theoretical design, I found after several hours’ trial that the difficulty of taking the edge clean off the turn in this particular form of curves (and without the intervention of a short opposite curve, which would render it tolerably easy; in fact, a modification of the Q) was, from the slight practice then obtainable, beyond any practical skill that I could bring to bear upon it.

“But from these attempts the following important question, which I had not thought about before, was brought forcibly to my mind: Can a clean turn be made upon a cutting edge? We must remember that in all the known turns, the skater touches for a moment the flat of the iron, passes over it as it were, and it is this instantaneous poising on the flat of the skate that gives a sort of relief. But it is quite a new feature, indeed, when we intend performing entirely upon one edge, and we can understand that if the skate has too much bearing upon the ice we shall stick fast. My experience has been with my ordinary skates of seven feet radius, a curve common in our club; and with such a pair, whilst I cannot doubt of



ultimate success, notwithstanding my first failures in endeavouring to carry out my original design of this turn, yet I should much like to try a more highly curved skate.

"It was, however, in so practising that I made a new discovery, viz. that the position of the curves might be differently arranged without altering the principle of the turn, and that then, though extremely difficult, it would be easier to do thus, the skater going in a forward direction from A to B, and in a backward direction from B to C (Figs. 77, 78); and that if a portion of the said curve were



altered, as in the dotted line, it would still more facilitate matters, by raising the skater from his first inclination, and preparing him for the second by the peculiar action of centrifugal force at the time of the contemplated change.

"There must have happened at particular times, in the early career of all good skaters, a moment when, in spite of their efforts to the contrary, the skates have the mastery, and, knowing this feature, my fellow-labourer and myself have worked against the weak point, in the plan of this work. I will

recall a few of the tendencies. The desire of the inside edge to curl in; the unwilling way in which turns from a back-edge come, and, when they do, often coming with a twist, causing another involuntary turn; the difficulty of the Q's, &c. are all instances of what I mean as having been felt in our early efforts.

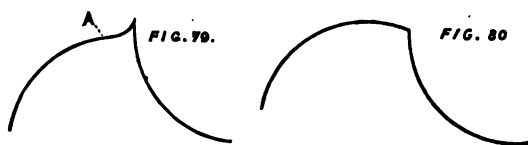
"The skates seem inclined to assert their authority more than ever in the Rocking Turn, and the little alteration of the curve that I have just alluded to, appears to me, as far as my experience goes, the antidote to it. It seems to give to the skater the necessary little bit of controlling power, that plainly tells the skates they must go where the wearer likes, and not where they like.

"We will suppose then that Figs. 75, 76, 77, 78, represent about the practical limits of the range of position the curves may be placed in, and it is in all these gradations that a certain amount of altered inclination or rocking, exactly suited to their requirements, has to be interposed; hence the consummate difficulty.

"In my efforts, out of twenty trials about one will be a success, and perhaps that is as much as can be expected; of the nineteen failures every one will be, what I call a false turn: a little portion of an opposing curve would have crept in thus (Fig. 79), instead of the true curve, as Fig. 80.

"Now the false turn (which, as the reader will observe, consists of a minute portion of an opposite

curve before the change, yet so minute as hardly to be called a serpentine line) is really very small, and, notwithstanding its introduction, I have been (strange and impossible as it may appear) quite satisfied that I had correctly and truly altered the inclination, say from outside forwards to outside backwards; notwithstanding the small false curve had crept in, though I had felt myself doing the movement correctly, and it has not been until I had examined the skate marks that I could have be-



lieved in my non-success—when I say non-success, I allude of course to the true clean cut change.

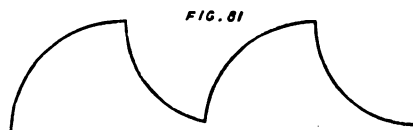
“We see then that even in this modification of the design of the original turn, the same tendency of an opposite curve to creep in exists. The skate appears to undergo some mysterious movement, which causes the introduction of the said opposite portion of curve, without apparently disturbing the skater, or hindering him—indeed it seems rather to assist him in the operation when making the change.

“But false turns, when we expect true, are not agreeable, and therefore I am pleased to say I have occasionally succeeded in doing what I

cannot but consider the true turns, from all the edges, A, B, C, D, even though, as from want of skill or a more highly curved skate, a slight scrape might be present.

“If ever it were necessary to turn on the toe or heel, as the case may be, it is so in this Rocking Turn, which, despising all half-measures, refuses to work at all under any other *régime*.

“I next tried the change in its double form thus (Fig. 81), and succeeded after the same fashion,



but only after numberless failures, for they are the most difficult movements I have ever encountered in skating (and I have always been fond of difficulties), requiring such alterations of position, and care in retaining the balance, that they can only be brought into subjection after much practice and experience.

“It can be doubled of course on all the four edges A, B, C, D, and perhaps reversed.

“The entire changes will be—

“*Rocking Turn A.*—Inside forwards to inside backwards.

“*Rocking Turn B.*—Inside backwards to inside forwards.

*“Rocking Turn C.*—Outside forwards to outside backwards.

*“Rocking Turn D.*—Outside backwards to outside forwards.

“There will then be a combination of more than one turn—compound turns. Forecasting, too, the future progress of our art, we can see looming in the far distance, the incorporation of the large loops, simple and compound, of ordinary turns simple and compound, with Rocking Turns simple and compound, and the latter again with Q’s simple and compound.

“And what more shall I say? Why to look forward to the time when we can have the Rocking Turn introduced into combined skating?



“Fresh marks appear on the ice, approaching the form of letters, as Fig. 82.

“Finally, whilst this turn opens out countless delights, and (I may add) tumbles, for the figure-skater, we find with somewhat of a feeling of regret that it entirely exhausts the subject as far as fresh elements to combine are concerned, for we have explored them all. Although it may be suggested by some that we might attempt to turn all the turns the contrary way, yet this is not practical, and, even if it were, no new combinations would arise; therefore, our pleasing task is at an end so far.

“Let not the reader, even if he should accomplish all that we have described as actual results, and all that we have forecasted, sigh that there are no more worlds to conquer, no more victories to be achieved. Were this not a true art, he might have occasion to do so ; but it is, and in it he will always be a learner, seeking the ever far off goal of perfection in his illustrations of the art of skating, which, taking into account its scientific beauties, its elegance, its invigorating and health-giving qualities, may fairly claim the highest place in all manly recreations, especially in that peculiar season when ‘the face of the deep is frozen, and the waters hid as with a stone.’”

## CHAPTER XII.

BEING A CHAPTER FOR THE LADIES, CONTAIN-  
ING REMARKS UPON :—

The Frost—The Dress—The Boots—The Age at which to begin—  
Artificial Support—Natural Support—Explanation of the Edges  
—The Skate—The Fastening of the Skate—Putting on Skates  
in a Room—The Mechanical Skate with Wheels—The Attitude  
and general Action—The first Attempts to learn (Double Ser-  
pentine)—The Inside Edge forwards—The Inside Edge back-  
wards—The Outside Edge forwards—A Two-footed Figure back-  
wards, embracing both Edges—The Figure of 3—The Outside  
Edge backwards—The Combined Figure.

### THE FROST.

We can scarcely imagine a more delightful, ex-  
hilarating, and health-giving exercise for ladies in  
winter-time than skating. Do they not participate  
equally with ourselves in the indescribable charm  
of a fine fresh frosty morning, the roads as hard as  
adamant, and ringing to the sound of horses' hoofs  
and carriage wheels; the windows feathered and  
obscured with lovely crystals, so that it is only  
after the eager boys have breathed upon a little  
spot with great energy, that Paterfamilias gets a  
sight of the favourite thermometer, and finds that

the mercury bids fair to forsake the tube altogether, and take up its residence entirely in the bulb? Every blade of grass on the lawn, too, covered with its coating of white glassy dust, or the graceful trees bending their slender branches with the weight of a heavy rime, placed there in an enchanting manner in the night, by Nature's magic hand.

We rejoice to think that within the last few years the girls of England have been taking to skating in considerable numbers; and desiring to facilitate their efforts to learn, we have strung together a few practical remarks, we trust for their benefit, as we have had some experience in teaching our relatives and friends. We propose to give our remarks and instructions under a few separate heads, commencing with

#### THE DRESS.

Start not, fair readers! We are not so rash as to enter into a discussion with you on a topic in which, had we the ability, we certainly should not have the presumption, to interfere; we would rather agree with you that the present large *chignon* is admirably adapted as a buffer or fender to save the back of the head from the painful effects of an unlucky tumble. Should we find you wearing a dress rather short, we should smilingly approve. We would, however, suggest that the arms have free motion, as they are great aids to balancing.

And now that we have tried to make ourselves so amiable, you must let us have our way with

#### THE BOOTS.

Yes, we must insist upon the lace-up boots as the best support to the ankle, and (at the sacrifice of supposed elegance) we must also insist on the absence of the tremendously high heels at present in vogue.

#### THE AGE AT WHICH TO BEGIN TO LEARN.

We recommend to all who wish to skate to commence learning at a very early age. We have seen children of seven go along very fairly. We believe that the art may be learnt at any reasonable age. However, let not our fair readers be deterred, thinking they are too old to learn, as in reality it is easier for a person of say fourteen or eighteen to learn, than a child of seven or eight, as the ankles become, as a rule, stronger with advancing years.

#### ARTIFICIAL SUPPORT.

We divide our fair friends into two classes: those whose temperament is naturally timid, and whose physical powers are a little under the usual standard (and in which class we include those with weak ankles), and those who are courageous and

strong. The former class will probably require artificial support to enable them to learn.

Now, some years ago we read of the suggestion as a support to ladies learning skating, of the use of a kind of basket-work crinoline or petticoat, and therefore of a bell-shape, tightly strapped round the waist, and reaching within a few inches of the ice. With this it would certainly appear impossible to fall, but we have never heard of its having come into practical use. We think the suggestion might, however, prove a very good one.

The chair has always been the most ready and sufficient support; the back should be taken hold of, the seat being furthest from the skater. When leaning too heavily, though, it sometimes tilts back, and we agree with another writer on skating, "Cyclos," that a light framework of wood might be put into better form than a chair, for the purpose of support, and used with great advantage in learning.

The ordinary stick is a very bad and treacherous aid; we are both most opposed to its use.

#### NATURAL SUPPORT.

By far the most agreeable, if not quite perhaps the best aid, is for the young lady to be supported by the arms, or by the elbows, or hands, either by two or a "single" gentleman. The time taken in learning; it is true, is thus much prolonged, for

there is such a deal of consultation and advice to be given, and adjustment of the straps of the skate, that will slip to the side of the foot, that we have known several hours to pass by, almost as rapidly as the proverbial five minutes, without being able to detect that much progress has been made—that is, in “the skating department.”

For the second class of our fair skaters, namely, those whose temperament is ardent, and whose courage and ankles are strong, we earnestly recommend the putting aside of all artificial, and the employment of the natural support as little as may be. Such hosts of directions are showered down upon the unfortunate beginner, that it is no wonder if she inwardly exclaims, on finding the impossibility of carrying them out, “Save me from my friends.” This we intend to do if we can.

#### EXPLANATION OF THE “EDGES” AS CONNECTED WITH THE SKATE.

The inside edge is on the left of the right skate, and the right of the left skate. The outside edge is on the right of the right skate, and the left of the left skate, whether the motion is in a forward or backward direction.

#### THE SKATE.

We recommend ladies desiring to skate to get their skates made by our Club maker, Mr. Hill, of

the Haymarket, who has had considerable experience in the construction of skates for ladies; and with regard to the form of the skate for beginners, we think that for those who have to learn how to skate straightforward and backward, a skate with an iron straight enough to touch the ice almost the whole length of the skate is the best. With a skate of this description the weight of the body is distributed along the whole length of the skate, and the beginner does not feel the tendency to turn round in a helpless sort of way at the end of each stroke, which we frequently see in beginners, who have skates made for figure-skating, and comparatively much more curved.

For the purpose of learning, then, the simple forward and backward movements on the inside edge, we recommend the ladies to direct Mr. Hill to make them a pair with irons curved to a radius of fifteen feet, which may virtually be called flat. We must insist upon this curve for beginners, as we are sure they will learn with more comfort, if not quite so rapidly. After they have learnt the forward and backward movements, we recommend them to change the irons of the skates, and have others put in of about half the radius, viz. seven feet. The radius of the curve is easily checked with a piece of string of the proper length, and a pencil and paper.


## THE FASTENINGS OF THE SKATE.

We approve of simplicity in this matter. The heel-fastening known as the T is very good, as it does away with the use of the heel-strap (we have given an illustration of it at page 70); a piece of iron fastened across the front of the wood-work under the ball of the foot, and turned up about three-eighths of an inch, will prevent the skate slipping to the side; a strap rather broad, and split into two ends and buckles, and going over the toe, will render all secure. The holes in all straps should only be one quarter of an inch apart, and not half, or even three-quarters, as is often the case, necessitating either a loose skate, or a painful compression of the foot.

The next simple skate is the one with an iron pike with a notch in it, fitting a plate let into the heel; a heel-strap is generally worn with this as additional security. There is the cramp-iron across the front, and a toe-cap to this skate, instead of a strap. An illustration will be found at page 68.

We approve of the skate-iron fitted permanently into a lace-up boot for ladies, if they will not mind the trouble of changing their boots.

We consider these three the best; another skate for ladies has been made without any other heel fastening than a semicircular piece of stout leather round the heel of the skate, and the customary heel-strap, no pike nor screw. This is called the



Clog-heel Skate, and as it has been supplied by Mr. Hill to the Royal Family, we give an illustration of it ; there is too much pressure on the instep, we think, and it is somewhat clumsy.

Other ordinary skates have the screw or pike,



LADIES' CLOG-SKATE.

and usual straps, demanding from us no particular notice ; they will answer very well, but are, in our opinion, inferior to those we have first mentioned. If the skate should be fastened simply with straps, there is nothing for efficiency and comfort to beat

one long strap, having one buckle. The strap should be inserted in the middle hole of the wood of the skate, passed through the top one, and back to the hole near the heel, and this is to be so arranged before the skate is put to the foot. On putting on the skate the foot must be passed through the loops thus formed, the spike in the heel of the skate adjusted to the hole in the heel of the boot, and the strap passed through the hole at the heel of the skate, and buckled at the instep. For this method the skate must have a spike to the heel, and not a screw. The width of irons should be one quarter of an inch.

#### PUTTING ON SKATES IN A ROOM.

Before the ice arrives, ladies will find it advantageous to put on their skates in a room (without a carpet), and walk about on them. This strengthens the ankle, and enables the learner to see the style of action required. To stand for some considerable time, first on one foot and then on the other, will also be found of great assistance. As a rule, when ladies put on skates and go on the ice for the first time, their ankles "go over" from weakness to such an extent, either one way or the other, that it is quite painful to behold.

THE MECHANICAL SKATE WITH WHEELS.

We think that ladies may practise with these also. Something of the nature of what they will have to do on the ice, may thus be learnt.

THE ATTITUDE AND GENERAL ACTION.

In learning simple straightforward or backward skating on the inside edge, we can hardly expect ladies to do otherwise than hold themselves in the position known as full front. But when they have learnt thus to skate forwards and backwards in a straight direction with tolerable ease on the skate with the iron nearly flat, and are about to change it for one more curved, to enable them to commence the rudiments of figure-skating, we earnestly advise them simultaneously to adopt a semi-sideways attitude, which they will find fully detailed at page 88, *et seq.* In taking a stroke the knees are bent ; but whenever the fair skater is balancing and travelling on one foot, the knee belonging to that foot must be immediately straightened and kept quite stiff, as this causes rigidity of the ankle also ; and the carriage of the body must be erect, to perfectly ensure which, it is necessary that the other leg and foot, not at the moment in use, be approximated as near to the one on which the skater is balanced as possible, without dragging the skate on the ice ; the knee of this leg ought also to be very nearly

straight, the toe slightly pointed down; the foot may be turned out, or simply removed a little behind the other.

These are two fundamental rules, without the observance of which, our fair pupils may make up their minds at once that they will never skate in good form, or carry out some portion, at least, of the art of figure-skating, with ease, comfort, and ability.

The position of the arms is most important also. With the early efforts of the skater they are sure to be swung somewhat wildly about, in order to gain the balance. Afterwards they become more under control; and when the balance is attained, they ought to settle down at once into the following positions: the one corresponding to and bearing the same name as the foot on which the fair skater is balanced and travelling should be elevated, but not quite to the horizontal position, and the elbow should be slightly bent; the other should hang down nearly straight, and nearly touching the body.

Every alternate stroke will require an alteration of the attitude, to correspond with the leg and foot in use.

We have now given our fair readers as much condensed elementary instruction upon the nature of the attitude and action required, as will, with the further advice we shall presently offer, enable them, we trust, to skate in a proper manner.

## DOUBLE SERPENTINE :

## THE FIRST ATTEMPT TO LEARN.

We purpose commencing this, by teaching the fair skater a two-footed movement in a forward and backward direction, the peculiarity of which is that both feet are always on the ice the whole time, affording great stability, whilst it is undoubtedly the easiest feat in skating, as there is no striking out.

Let the two feet be placed close together, and the knees and ankles inclined rather inwards, and with the inside edge of the right foot make a curve with it round the left, bearing principally on the heel. The curve being made, the right foot should be brought a little in advance of the left, when a curve in the opposite direction should be made with the left foot. But little progress will be made at first, but by leaning well on the heel in making the curves, and keeping the ankles inclined inwards, the forward motion will soon be acquired.

When a beginner has so far advanced, the next thing is to skate backwards.

To do this the fair skater must place herself in the same position as if she were going to skate forwards, as last described, with this difference, that, instead of leaning on the heels, the weight of the body should now be on the toes ; and both feet being on the ice, and parallel, and the ankles

inclined inwards, a circle should be made with the right foot round the left : by describing this circle the inside edge of the skate will be opposed to the surface of the ice in a direction almost at right angles to the other foot, and thus involuntarily a purchase can be obtained to push the left foot backwards.

Directly the circle is finished with the right, the same thing must be done with the left foot. A wriggling of the body from one side to the other will be the first effect of the above directions, both in the forward and backward movements ; but the ability to make the circle larger, and to get a real though imperceptible stroke at each turn in the position of the body, will soon come with practice.\*

If there should be any wind blowing, a beginner should take advantage of it to assist her in progressing either backwards or forwards, according to the desired direction of going.

Although we are opposed as a rule to any help being given (when the temperament and courage of the fair skater can dispense with it) by means of holding her up by the hands, we think that if ever it can be employed with advantage in learning to skate, it is in learning to skate backwards. Thus, let the teacher take the hands of the pupil and make her lean forwards, the ankles being

\* This means of progression is well adapted for going over ice that is thin and unsafe, as the absence of the stroke causes less derangement of the ice than the usual method of striking out.

inclined inwards; then skating forwards in the serpentine manner above described, let him quickly push the pupil backwards, first with the right and then with the left hand, by which means the weight of the body of the pupil is thrown first to the left and then to the right, and the circles above described are virtually made. By using the serpentine forward motion, the teacher in fact progresses forwards by the same means as he wishes his pupil to progress backwards. Thus a lady who had acquired either movement could easily instruct a lady in its reverse, whilst she improved her own practice.

At various times there will be gathered up a considerable momentum: then let the skater place her feet side by side, and so travel along, either in a straight line or curve, until the impulse is exhausted, and she may whilst doing this occasionally make an attempt to balance on one foot.

#### THE INSIDE EDGE FORWARDS.

This is decidedly more difficult, as it is the first real direct attempt at balancing on one foot, from a stroke taken with the other. It would be useless to repeat here what we have written elsewhere, and so we refer our fair readers to the instructions we have given at page III *et seq.*

#### THE INSIDE EDGE BACKWARDS.

As done in the old way, which is much the easiest, but very ugly, the body leans forward, full

front, and the feet are turned in, and the skater backs as it were by alternate strokes. The toe of the striking skate is pressed into the ice on its inside edge, and the balancing taken up with the other, therefore the former ought to be lifted off whilst this is going on. But little attention can be given to the attitude. After the fair skater has attained this kind of inside edge backwards, she may, if she wishes to be more accomplished, turn to page 117 *et seq.* where she will find a much better but more difficult modification of it, embracing a semi-sideways attitude, which will enable her to make larger curves and attain steadier balancing.

#### THE OUTSIDE EDGE FORWARDS.

In another part of our work we have given a method of learning this, the greatest difficulty the would-be figure-skater has to contend with. We will now place before the fair skater another method which we think she will find most useful.

Let the skater stand with both feet parallel, and, supposing the circle she is going to describe is from left to right, let her bend the right arm and force the right shoulder back, so that the thumb of the right hand is nearly touching it ; and the palm of the hand being upwards, the head should be turned so that the eyes rest naturally on the uplifted thumb. Then striking with the inner edge of the left foot, she will find herself propelled in a circle ;

having gone some yards, then let her suddenly bring the left foot (which after making the stroke has been kept behind the right) across the right, and place it on the ice, and continue the circle with it on the inner edge, but only for a second, as the outer edge with the right is the work to be accomplished, the inner edge in this instance being simply used as a decoy to get the skater on to the right balance for putting down the right foot. It is very essential to keep the ankles stiff in attempting this practice, as if the skate is on the edge by reason of the bending of the ankle, and the body is not at a corresponding angle, a fall is almost certain; it is also necessary to attend to the position of the feet in placing them on the ice when crossing. The toe of either foot should be sufficiently turned out or in to proceed in the direction of the circle at once, on putting down the foot. If this is not attended to, the foot that is used for crossing goes off at a tangent, and probably throws the skater down, or at any rate throws her off the edge, or stops the impetus.

If a beginner will only go boldly at this figure, and attempt it with a certain amount of pace and dash, it will actually be easier to do than if she went slowly and cautiously to work, because, so long as she is moving in a circle and leaning over on the edge, she is safe, as the edge of the skate is opposed to the ice, and by progressing in a circle centrifugal force keeps her from falling. That this

is a fact is clearly demonstrated by any one able to do outside edges perfectly, allowing himself to come to a standstill while on the edge; the effect, unless the perpendicular is immediately resumed, is a fall in the direction in which the experimentalist was leaning, at the time of stoppage.

After performing a circle from left to right some half-a-dozen times, let the operation be reversed by describing a circle in a similar way, but from right to left. This practice adhered to for two or three hours for several days, will enable any person with moderately strong ankles to acquire that great desideratum in skating, the outside edge. We consider putting up the hand in the manner we have described most important, as in that position, if the head and eyes are turned towards it and a start effected, the ankles being kept stiff, a leaning towards the centre must necessarily take place.

It must then be the care of the skater to use the outside edge almost entirely,—that is, the foot nearest the centre, the other being merely crossed over and put down, not for the purpose of learning the inside edge, but of continuing the circle and allowing the foot nearest the centre to be again put down while the body is leaning in that direction. We don't know the origin of the term, or whether it is in Suffolk only that it is used; but this going round a circle, crossing the feet, is there called "cutting plum puddings."

The method of getting on to the edge being

accomplished, the beginner should proceed to learn to put the previous practice to some use, and, discarding the inside for the purpose of help, learn to cut the outside edge on either foot alternately. To do this we think the best plan is to place two small pieces of snow about four yards apart, and cut the figure of 8 round them, going round one with the right and one with the left foot.

The holding of the hand and arm in the position described, will be found of great assistance in learning to come round. At the end of each circle it will be seen that as the foot with which a circle is going to be begun, is put to the ice, the other foot is brought over for the outside edge (on which the circle had just been completed) to the inside edge, and the push made from that edge to give the proper impetus to make the new circle.

The figure of 8 is capital practice for outside edges, and it has this advantage, that it forces the beginner to work with each foot alternately.

#### A TWO-FOOTED FIGURE IN A BACKWARD DIRECTION, EMBRACING THE INSIDE AND OUTSIDE.

This will be found to assist the fair skater in another movement which we shall presently describe. The one under consideration is done as follows; let her stand as if starting to skate in the ordinary way backwards, and when the circle has been made by the right foot round the left,

the right, instead of being brought parallel to the left, is allowed to follow it in the curve which the left foot, being on the inside edge, will naturally assume, so that the right heel is close to the left toe, and the right foot on the outside and the left foot on the inside edge. When the half circle has been completed in this way, a stroke in the nature of the circle is made with the left foot, the heel of which is immediately brought to follow to the toe of the right, and so on *ad infinitum*. Although the foot that follows is said to be on the outside edge, all the real power of leaning over is gained from the inside edge of the foot, that leads the other. The foot that follows is simply on the outside edge in consequence of the curve described by the preceding foot, and the fact of having two feet on the ice while on an edge. This is therefore a capital figure for learning inside edge backwards, and will give a great insight into outside backwards.

#### THE FIGURE OF 3.

Let the learner begin with an outside edge forwards (say with the right foot), keeping the knee (for the nonce) slightly bent; when half a circle has been completed, the left shoulder should be suddenly brought round, and the knee straightened. This bringing of the shoulder round will give a twist to the body, and throw the skater on to the inside edge backwards, when the left shoulder must

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be immediately forced back, and the toe of the left foot pointed outwards, almost at right angles to the right; for if the shoulder is not kept back, or if the left toe be turned inwards, the skater comes round at once on the inside back, instead of making a curve as large on that edge as she had described on the outside forward at the beginning of the figure.

It will perhaps be found more easy at first to make the turn soon after getting on the outside edge, but it is essential to get thoroughly on the edge, as one often sees a beginner striking with the left foot and making the turn on the right directly the stroke is made, and never getting on the outside edge at all.

#### THE OUTSIDE EDGE BACKWARDS.

If when going on the inside backwards of a figure of 3, say on the right foot, the left is put down by its side and the right taken up and the curve continued, the skater must necessarily be on the outside edge backwards; but this will be found rather nervous work at first, as, being on the outside edge, she will not have the advantage of a leg to put down in case of difficulty, as she would were she doing an inside edge backwards; but by getting pretty well on the heel of the skate, and looking over the reverse shoulder (that is, if skating with the right leg looking over the left shoulder, and *vice versa*), the difficulty will soon be overcome with practice. Holding up the hand and looking at it,

as described for learning outside forward, will also in this practice be found very useful, as it has the effect of throwing the reverse shoulder back, and also throwing the skater more on to the heel of the skate than she would be, if her hand were in front of her body.

#### THE COMBINED FIGURE.

Ladies who can accomplish the foregoing simple movements will be able to skate them in company. They will find the method described at page 168 *et seq.* and they can pick out the movements suitable to their capacity.

We must now take leave of them with our best wishes for their success, and with the concluding observation that if they wish, as they advance in skill, to go more thoroughly into the whole subject, and see how far it extends beyond the movements described in this chapter, we refer them to the main work itself, where they will find matters treated of in a more systematic and elaborate manner than could be done in the limits of the chapter we have devoted to them, but in which we trust they will find sufficient instruction, as far as it goes, to enable them to acquire the art of skating.

## CHAPTER XIII.

### NONDESCRIPT FIGURES.

IN this chapter, according to promise, we shall notice a miscellaneous collection of curious movements, leaving it to the judgment, good taste, and pleasure of the skater, to learn them or not, as he thinks proper; merely remarking, that he cannot be too careful in thinking lightly of or despising anything that might have a tendency to more completely educate the feet. It might so happen to some, that in learning one of these figures they might obtain the key to a better movement.

Although looking at them in the light of a relaxation from our more severe and classical studies, yet some may be of practical use.

The easiest of all the movements in skating is

#### THE SERPENTINE FORWARDS ON BOTH FEET.

This is skated both feet on the ice together full front and parallel; a slight turn of the body and feet to the right and left alternately, and a corresponding pressure on the inside edge, are sufficient

directions for this simple and easiest method of progression. The same may be said of

THE SERPENTINE BACKWARDS ON BOTH FEET,

Which the reader will be able to work as readily. In these two movements we have certainly descended to the lowest depths of our art. It has often been suggested that the very very timid might commence to learn after this method, and for this reason we have recommended it to the ladies. As a last resource, perhaps, such a means may be allowable ; but we should be sorry to see it the rule, or where are our bold skaters to come from ?

THE SERPENTINE FORWARDS ON ONE FOOT.

It is possible, by twisting the ankle, to get enough impulse out of the edges to work forwards on one without any aid from the other foot. It thus develops a new power, which at times may be very useful. It is a miniature self-sustaining serpentine line.

THE SERPENTINE BACKWARDS ON ONE FOOT.

The like applies to this, which needs no further description. An effective finish of a very large serpentine backwards can be made with a string of these Lilliputs, especially if from them the skater make five or six turns as a wind-up.

## THE STRAIGHT LINE FORWARDS.

This is done on one foot and on the flat of the iron, after a smart run for speed. The difficulty now consists in keeping off either edge, and preserving the line true without its aid, and it is a difficulty which not every skater will master. To look down is fatal to success; the eyes should be level with the horizon.

## THE STRAIGHT LINE BACKWARDS

Will be taken up after a forward run for speed, and a turn to backwards, on to the foot selected. Greater difficulty than could be supposed attends this apparently simple movement, so great is the desire to get on to the edge. We are speaking of good skaters, not learners. With the wind in favour, an enormous length may thus be traversed.

## THE STRAIGHT LINE FORWARDS AND BACKWARDS, OR BACKWARDS AND FORWARDS,

Must be carried out by interposing the necessary turn on the one foot to effect the change. To regain the flat as soon after it as possible is no easy matter, and therefore becomes capital practice.

#### STRAIGHT AND CURVED LINES WITH BOTH FEET ON THE ICE.

We see this combination used by the many who run and race about, and play hockey, which generally noisy game on the ice is hardly interesting for the skater, who aims at a higher branch of his art.

#### TREADING THE CIRCLE

Is done by placing one foot in front before the other, and simply lifting each up and setting it down: a forward progression will take place. A much more effective figure is made when this is done in a backward direction.

#### THE CANADIAN FIGURE.

By swinging the legs alternately to the front, in a kind of circular walk forwards, great speed can be attained.

#### SINGLE BACK-SCRATCH

Is where one foot is kept on the ice and the other employed in scratching out at an angle, causing a backward motion.

## DOUBLE BACK-SCRATCH.

In this, the skater scratches also at an angle to the line of progress, but with both feet in alternate quick sharp strokes, which propel him backwards with a velocity that is quite surprising.

## THE BACK-TWIST

Is when the feet are placed one before the other, and both being kept on the ice, impulse is obtained by twisting the feet with a snake-like or serpentine motion, out and in. In most of these and similar movements, the inclination of the body and the direction of going admit of being frequently changed.

## JUMPING IN SKATES.

This seems a perilous feat at first, but it is not really so. We recommend all skaters to learn it, not on account of its elegance (although, by the by, one of the writers is acquainted with one old skater who likes a jump at the turn of the 3, and who was kind enough to tell him that his skating would be much improved by its introduction: it was his hobby, and to humour him he did it once or twice to show him that there was no particular difficulty in it), for it is ugly in the extreme. We are, of course, speaking of a jump completely off

the ice of any height the skater can attain to. The Dutch, we believe, do three feet easily. It is most useful in enabling us to clear the obstacles that are frequently met with on the ice.

#### IMITATION OF THE ORDINARY WALK.

A curious effect may be produced by a skater, having previously gained a good start, placing and using his feet as if walking, and taking stately steps forwards. While he is carried on by the impulse thus gained, his steps, however slow, seem to cause him to cover much ice, and he comes along in a way most puzzling to an onlooker.

#### THE STROKE FROM THE OUTSIDE TO THE INSIDE.

It is quite possible to obtain some useful impetus, by knowing the action of this stroke; and, although we cannot say very much in its favour as an addition to the beauties of figure-skating, we are well aware, from personal experience, that it is one of those little links in the chain of our art, the acquisition of which is a step to obtain the complete mastery of the skate. The push or propelling stroke is got from the outside, either forwards or backwards, the inside corresponding to the direction, the curve being described may be taken

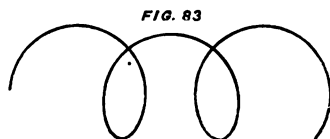
up with the other foot, either when it is in front, behind, or across.

The skater has probably done a little of it, when learning the outside forwards or backwards in the circle; and if so, he has only to dwell longer on the edge taken up from the outside stroke, balancing on one foot and in large curves. The stroke is then from C and D only.

One of the writers once worked very hard at this curious bit of skating, but after it had served his turn as an aid, he discontinued it, as it led up to nothing particular in figure-skating.

#### THE SMALL LOOP.

This figure, on a large scale, has been already noticed, and the reason we class it again here is because in its present dwarfed form the skater is no longer able to retain his usual neat attitude: he will have to swing the leg out to the front to give himself the desired twirl or spin at the right moment, and he may, perhaps, require skates rather more curved. Therefore this figure is rarely practised in England. It is a very old one, and was skated by one of the writers twenty years ago. It can be done on all the edges A, B, C, D, and doubled thus (Fig. 83).



To the American and Canadian skaters, who use highly curved skates, or as they (with that peculiar talent they possess of coining new words and applying and altering old ones to suit their wants) call them "rockers," belongs the credit of more extensively developing the loop, or, as they graphically name it, "kink;" and we cannot do better, perhaps, than quote from the *Field*, Jan. 18, 1868, how to do the figure from a Canadian point of view :

"A figure of the same sort (referring to a previously described figure) is formed on one edge, looped. It can be done I F, I B; O F, O B. The effect is produced by bringing the balancing (striking-off) foot and arm from forward at the time of making the loop, if on the forward rolls; if on the back rolls, by bringing stroke (striking) and balancing arm more back. If on the outer rolls, back or forwards, the leg stroke (*i.e.* striking) and corresponding arm are a centrifugal balance, the other arm centripetal, pointing down to the centre; on the inward rolls, the reverse." Again referring to a similar figure, the writer says: "It can be done on any of the edges, but is usually practised on the outside edge forwards, after getting up a good deal of speed; and many do not seem equally up in both legs. It is a rapid rotary pirouette, not very graceful, but showing the great powers of a strong skater. The body from the hips is leaned forward, and the balancing

leg off the ice raised almost horizontally, the hurley (ice hockey) stick often tucked under the arm—sometimes as many as ten or a dozen or more revolutions being turned.” Horizontal leg! O ye gods of the Long Water!

There are several Canadian and American two-footed figures, such as the “Grape Vine,” “Double Grape Vine,” “Ransome,” &c. &c. The last figure we shall notice is a very old one. Who the inventor of it was, we know not, but it is the best and manliest of all the two-footed figures.

#### THE SPREAD EAGLE.

This well-known figure has quite gone out of favour with the first skaters in England, and no wonder, say what we can in its favour: both feet on the ice for any length of time is decidedly inferior to a balance on one only. Nevertheless there is a boldness and dash about this figure, when very well done, that will always keep it in favour with some. In our opinion its essential requisites are size, velocity, and an upright attitude. It can readily be done by all those who can turn out their toes with ease to a straight line. But there are some who never can manage it, as it requires a peculiar physical and anatomical capability of extra rotation of the joints. It is the last class wanting these particular gifts who are too ready to cry down the Spread Eagle.

After a run, the feet are turned out, the heels kept as nearly together as convenient, and the legs as straight as possible, the arms placed a-kimbo, the body erect, and the head turned in the direction of going. This we consider the best attitude; the other is thus: after a run the feet are turned out, the heels kept about twelve or eighteen inches apart, the whole body lowered by bending the knees, the hands rested on the hips or knees, and the elbows bent. In either attitude the skater will describe a large circle of inside forwards or backwards, whichever he pleases to call it. If he can turn out his toes still more, he will probably make a straight line; and if he can turn them behind him, a feat of rare occurrence, the skater will describe the outside curve. He will consequently have to lean backwards; now if he can join the inside and outside curves together into the serpentine line, he will have accomplished the most difficult of the spread eagles.

In an old work on skating the attitude of a fencer is recommended for the figure; and if attitudes were the fashion in 1869, we should feel inclined to endorse and recognise the suggestion as a meritorious one.

All these spread-eagles require to be well begun, or they do not go well, but here is one of the *vires acquerit eundo* description, self-sustaining.—

## THE FLYING SPREAD-EAGLE.

Having turned out the feet as far as possible, yet still on the inside edge, let the skater give a slight twist to the hindmost foot, to catch the edge: sufficient, but no more than necessary, to get impulse. This, disguised as much as possible, must be used by the skater, and the movement, assisted by a sideways rocking motion, throwing the weight into the stroke. With practice he will be able to describe a large circle, keeping up the motion as long, and almost as fast as his most sanguine hopes could aspire to; and if he takes care to hide, to the casual observer, his *modus operandi*, the effect will be very curious. One of the writers has seen it very well skated by a gentleman who learnt it in Canada.

Is there a skater who could do it on the outside, that is, with the toes turned behind?

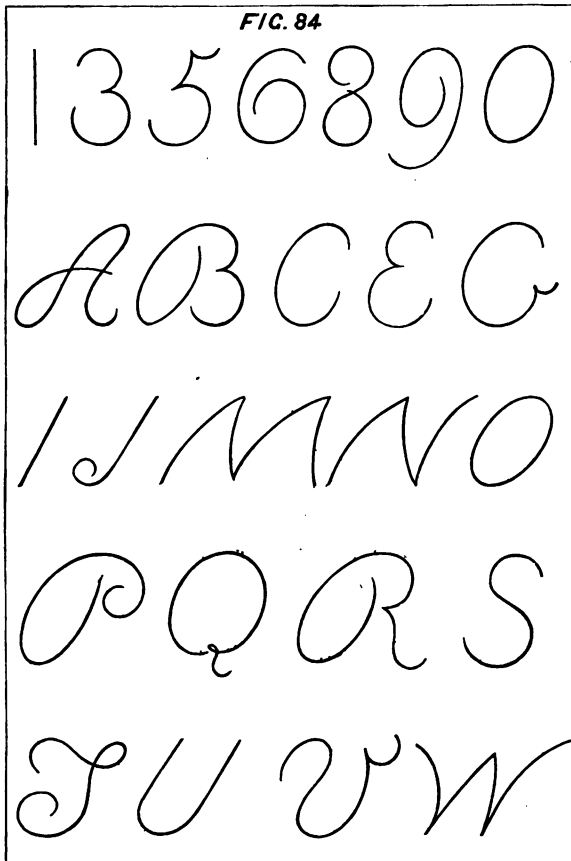
## THE MERCURY FIGURE.

This old figure is only an imitation of the supposed attitude of the winged messenger when in rapid flight. It is done on any edge or combined edges, or on the flat of the skate, after a very rapid run on both feet for speed, and the necessary action to place the skater on the required edge on one foot only.

## ON CUTTING OUT YOUR NAME.

(Fig. 84.)

We have now finished our figures, but before we quite wind up the work, we must have our say on this topic. Who has not heard from many old skaters, or rather from those who class themselves as such, but more particularly from non-skaters of either sex, of a generation that is fast fading away, how some famous skater of their day *cut out his name*, and who has not brought down their ire if the possibility of the feat was doubted? Strange, too, in the *Times* for January 1864, may be read an account of a little girl of eleven years of age who cut out her name. We, too, have heard small boys declare they saw a skater cutting out his name; nay, even more, an old skater once told one of the writers he thought it was the operation that he was then engaged in! 'Tis strange! 'tis passing strange! but no less strange than true, that this feat is an *impossibility* either to ancient or modern skating. When a boy, one of the writers used often to be in the company of the best skater of the locality in which he resided in the country, and he had attained this singular reputation, "He could cut out his name." On being asked if it were true, if he would be kind enough to permit the inquirer to witness the feat, he ridiculed the idea of such a thing being possible; he could not do



Some of these letters and figures are well known results ; by induction we conceive the others possible.

it, but he suggested that perhaps by standing still on one foot, and scratching and scribbling away with the other, as if the foot were armed with a pen, the idea might have arisen. This gentleman was a very fair and powerful skater, but his capabilities did not even extend to the double 3 ; and as for the serpentine line and Q, such things were utterly unknown in the country, as was every movement relating to combined skating.

This myth, Phoenix-like, rises from its ashes ; you may, even at the present day, hear people talk about it. Have the skaters of the present day degenerated ? We emphatically deny it ; the art has never been so highly developed as at the present time. The cutting out of a name never was and never will be done ; that is to say, by a method of pure skating. We will take a look back at some of our figures and letters, for the reader who has followed us is aware of the combinations that really do exist. Thus the 3 might serve as a B or E ; the C, G, I, J, O, P, Q, S, U, V, W, N, M, W, exist, such as they are ; and our figures are 1, 3, 5, 6, 8, 9, 0 : and suppose we torture double turns into M U N, we shall have exhausted resources, almost the whole of which were unknown to the last generation. We leave it to the unprejudiced mind of any man who really understands advanced skating to corroborate us in our opinion, that the feat of "cutting out your name" by a method of pure

continuous skating is impossible. The mere fact of a few of these letters making something like a name, even could we join them, alters not the fact; and as for a little girl of eleven doing such a thing, why it is simply ridiculous.

The myth will not entirely die out until skating becomes better known, and this is now rapidly being the case. In the meantime it is the duty of every skater of either sex to do what they can to break down such a delusion. Let us weed out the fable and mystery of the art, and master some of its difficulties that do exist, without following this will-o'-the-wisp.

In conclusion, we think that the reader will agree with us that the movements hastily glanced at in this last chapter are very very far removed from high art, which for the last time may be said to consist of balancing the body steadily on one foot in a perfect attitude, and getting fresh impulse from a change of feet, such changes being at long intervals, yet sufficiently close to keep up the motion with ease, grace, and speed, no matter what may be the nature of the turns and changes of edge the skater may think proper to introduce; the topmost branch of such high art being that in which skaters, possessed of these excellent qualities, merge their individual actions into the combined figure, which in itself must embrace not only the standard movements handed down to us by

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